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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5897

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&lt;400&gt; 5901

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Arg Ala Pro Lys Leu Phe Pro Met Ala Phe Asn Leu Val Lys Ser Phe		
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Met Ser Glu Asp Thr Arg Lys Lys Ile Met Val Leu Gly Ala Asn Trp		
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&lt;210&gt; 5910

<211> 899  
<212> PRT  
<213> Homo sapiens

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Gly Ser Phe Gly Ala Val Tyr Phe Ala Thr Asn Ala His Thr Ser Glu  
35 40 45  
Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys Gln Thr His Glu  
50 55 60  
Lys Trp Gln Asp Ile Leu Lys Glu Val Phe Leu Arg Gln Leu Lys  
65 70 75 80  
His Pro Asn Thr Ile Glu Tyr Lys Gly Cys Tyr Leu Lys Glu His Thr  
85 90 95  
Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala Ser Asp Leu Leu  
100 105 110  
Glu Val His Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr  
115 120 125  
His Gly Ala Leu His Gly Leu Ala Tyr Leu His Ser His Ala Leu Ile  
130 135 140  
His Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln  
145 150 155 160  
Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn  
165 170 175  
Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala  
180 185 190  
Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Ile Trp Ser Leu Gly  
195 200 205  
Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met  
210 215 220  
Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn Asp Ser Pro Thr  
225 230 235 240  
Leu Gln Ser Asn Glu Trp Thr Asp Ser Phe Arg Arg Phe Val Asp Tyr  
245 250 255  
Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu  
260 265 270  
Arg His Asp Phe Val Arg Arg Asp Arg Pro Leu Arg Val Leu Ile Asp  
275 280 285  
Leu Ile Gln Arg Thr Lys Asp Ala Val Arg Glu Leu Asp Asn Leu Gln  
290 295 300  
Tyr Arg Lys Met Lys Lys Ile Leu Phe Gln Glu Thr Arg Asn Gly Pro  
305 310 315 320  
Leu Asn Glu Ser Gln Glu Asp Glu Asp Ser Glu His Gly Thr Ser  
325 330 335  
Leu Asn Arg Glu Met Asp Ser Leu Gly Ser Asn His Ser Ile Pro Ser  
340 345 350  
Met Ser Val Ser Thr Gly Ser Gln Ser Ser Ser Val Asn Ser Met Gln  
355 360 365  
Glu Val Met Asp Glu Ser Ser Ser Glu Leu Val Met Met His Asp Asp  
370 375 380  
Glu Ser Thr Ile Asn Ser Ser Ser Val Val His Lys Lys Asp His

385	390	395	400
Val Phe Ile Arg Asp Glu Ala Gly His Gly Asp Pro Arg Pro Glu Pro			
405	410	415	
Arg Pro Thr Gln Ser Val Gln Ser Gln Ala Leu His Tyr Arg Asn Arg			
420	425	430	
Glu Arg Phe Ala Thr Ile Lys Ser Ala Ser Leu Val Thr Arg Gln Ile			
435	440	445	
His Glu His Glu Gln Glu Asn Glu Leu Arg Glu Gln Met Ser Gly Tyr			
450	455	460	
Lys Arg Met Arg Arg Gln His Gln Lys Gln Leu Ala Leu Glu Asn			
465	470	475	480
Lys Leu Lys Ala Glu Met Asp Glu His Arg Leu Lys Leu Gln Lys Glu			
485	490	495	
Val Glu Thr His Ala Asn Asn Ser Ser Ile Glu Leu Glu Lys Leu Ala			
500	505	510	
Lys Lys Gln Val Ala Ile Ile Glu Lys Glu Ala Lys Val Ala Ala Ala			
515	520	525	
Asp Glu Lys Lys Phe Gln Gln Gln Ile Leu Ala Gln Gln Lys Lys Asp			
530	535	540	
Leu Thr Thr Phe Leu Glu Ser Gln Lys Lys Gln Tyr Lys Ile Cys Lys			
545	550	555	560
Glu Lys Ile Lys Glu Glu Met Asn Glu Asp His Ser Thr Pro Lys Lys			
565	570	575	
Glu Lys Gln Glu Arg Ile Phe Lys His Lys Glu Asn Leu Gln His Thr			
580	585	590	
Gln Ala Glu Glu Ala His Leu Leu Thr Ser Thr Gly Asp Trp Thr			
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Thr Thr Lys Asn Cys Arg Phe Phe Lys Arg Lys Ile Met Ile Lys Arg			
610	615	620	
His Glu Val Glu Gln Gln Asn Ile Arg Glu Glu Leu Asn Lys Lys Arg			
625	630	635	640
Thr Met Lys Glu Met Glu His Ala Met Leu Ile Arg His Asp Glu Ser			
645	650	655	
Thr Arg Glu Leu Glu Tyr Arg Gln Leu His Thr Leu Gln Lys Leu Arg			
660	665	670	
Met Asp Leu Ile Arg Leu Gln His Gln Thr Glu Leu Glu Asn Gln Leu			
675	680	685	
Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu His Arg Lys His Val Met			
690	695	700	
Glu Leu Arg Gln Gln Pro Lys Asn Leu Lys Ala Met Glu Met Gln Ile			
705	710	715	720
Lys Lys Gln Phe Gln Asp Thr Cys Lys Val Gln Thr Lys Gln Tyr Lys			
725	730	735	
Ala Leu Lys Asn His Gln Leu Glu Val Thr Pro Lys Asn Glu His Lys			
740	745	750	
Thr Ile Leu Lys Thr Leu Lys Asp Glu Gln Thr Arg Lys Leu Ala Ile			
755	760	765	
Leu Ala Glu Gln Tyr Glu Gln Ser Ile Asn Glu Met Met Ala Ser Gln			
770	775	780	
Ala Leu Arg Leu Asp Glu Ala Gln Glu Ala Glu Cys Gln Ala Leu Arg			
785	790	795	800
Leu Gln Leu Gln Gln Glu Met Glu Leu Leu Asn Ala Tyr Gln Ser Lys			
805	810	815	
Ile Lys Met Gln Thr Glu Ala Gln His Glu Arg Glu Leu Gln Lys Leu			

820	825	830
Glu Gln Arg Val Ser Leu Arg Arg Ala His Leu Glu Gln Lys Ile Glu		
835	840	845
Glu Glu Leu Ala Ala Leu Gln Lys Glu Arg Ser Glu Arg Ile Lys Asn		
850	855	860
Leu Leu Glu Arg Gln Glu Arg Glu Ile Glu Thr Phe Asp Met Glu Ser		
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885	890	895
Asp Tyr Arg		

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<211> 645  
<212> DNA  
<213> Homo sapiens

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240  
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300  
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420  
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gaacacttta atatttcct tactgctaag gacctgaacg cctacaagaa gcaaggata  
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645

<210> 5912  
<211> 211  
<212> PRT  
<213> Homo sapiens

<400> 5912  
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Asp Leu Ile Leu Pro Asp Gly Gly Thr Pro Ala Gly Thr Ser Ser Pro  
35 40 45  
Ala Ser Ser Ser Ser Leu Leu Asn Arg Leu Gln Leu Asp Asp Asp Ile

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Asp	Gly	Glu Thr Arg Asp Leu Phe Val Ile Val Asp Asp Pro Lys Lys
65	70	75 80
His	Val Cys Thr Met Glu Thr Tyr Ile Thr Tyr Arg Ile Thr Thr Lys	
	85	90 95
Ser	Thr Arg Val Glu Phe Asp Leu Pro Glu Tyr Ser Val Arg Arg Arg	
	100	105 110
Tyr	Gln Asp Phe Asp Trp Leu Arg Ser Lys Leu Glu Ser Gln Pro	
	115	120 125
Thr	His Leu Ile Pro Pro Leu Pro Glu Lys Phe Val Val Lys Gly Val	
	130	135 140
Val	Asp Arg Phe Ser Glu Glu Phe Val Glu Thr Arg Arg Lys Ala Leu	
145	150	155 160
Asp	Lys Phe Leu Lys Arg Ile Thr Asp His Pro Val Leu Ser Phe Asn	
	165	170 175
Glu	His Phe Asn Ile Phe Leu Thr Ala Lys Asp Leu Asn Ala Tyr Lys	
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Val	Thr Arg	
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<210> 5913  
<211> 2495  
<212> DNA  
<213> Homo sapiens

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180  
tttacacttg aatcagactt ttagtttat ttagttttt gagtccatag ctgtcttcct  
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720  
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780

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1980  
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2400

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2495

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 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 5914  
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 35 40 45  
 Gly Gln Gly Phe Asp Arg His Leu Phe Ala Leu Arg His Leu Ala Ala  
 50 55 60  
 Ala Xaa Gly Ile Ile Leu Pro Glu Leu Tyr Leu Asp Pro Ala Tyr Gly  
 65 70 75 80  
 Gln Ile Asn His Asn Val Leu Ser Thr Ser Thr Leu Ser Ser Pro Ala  
 85 90 95  
 Val Asn Xaa Cys Arg Phe Ala Pro Val Val Ser Asp Ala Phe Gly Val  
 100 105 110  
 Gly Tyr Ala Val His Asp Asn Trp Ile Gly Cys Asn Val Ser Ser Tyr  
 115 120 125  
 Pro Gly Arg Asn Ala Arg Glu Phe Leu Gln Cys Val Glu Lys Ala Xaa  
 130 135 140  
 Glu Asp Met Phe Asp Ala Leu Glu Gly Lys Ser Ile Lys Ser  
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<210> 5915  
 <211> 457  
 <212> DNA  
 <213> Homo sapiens

<400> 5915  
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 240  
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 300  
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 360  
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 457

<210> 5916  
<211> 152  
<212> PRT  
<213> Homo sapiens

<400> 5916  
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20 25 30  
Tyr Val Asn Phe Val Asn Glu Val Phe His Gln Ala Phe Leu Leu Pro  
35 40 45  
Ser Cys Glu Ile Ala Val Thr Arg Lys Val Val Gln Val Tyr Arg Lys  
50 55 60  
Trp Ile Leu Gln Asp Pro Val Phe Met Glu Glu Pro Asp Arg Lys  
65 70 75 80  
Asp Val Ala Gln Glu Asp Ala Glu Lys Leu Gly Phe Ser Glu Thr Asp  
85 90 95  
Ser Lys Glu Ala Ser Ser Glu Ser Ser Gly His Lys Arg Ser Ser Ser  
100 105 110  
Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val  
115 120 125  
Thr Glu Glu Glu Asn Thr Asn Val Lys Ala Gly Val Gln Ala Leu Leu  
130 135 140  
Gln Val Phe Leu Ala Asn Ser Ala  
145 150

<210> 5917  
<211> 3727  
<212> DNA  
<213> Homo sapiens

<400> 5917  
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120  
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180  
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240  
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420  
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600

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660  
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720  
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780  
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840  
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900  
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960  
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<213> Homo sapiens

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Arg Glu Ser Ser Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe  
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Gln Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys  
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Arg Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys  
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His Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu  
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Val Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile  
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Ile Ser Phe Leu Arg Cys Leu Tyr Glu Glu Lys Gln Lys Glu His Ile  
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His Ile Gly Glu Met Lys Gln Thr Ser Gln Met Ala Ala Glu Asn Ile  
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Gly Ser Glu Leu Pro Pro Ser Ala Thr Arg Phe Arg Leu Asp Met Leu  
305 310 315 320  
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Pro Ser Val Cys Glu Lys Glu Ala Leu Pro Ile Ser Glu Ser Ser Phe  
370 375 380  
Lys Leu Leu Gly Ser Ser Glu Asp Leu Ser Ser Asp Ser Glu Ser His

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Arg Ala Asn Thr Leu Ser His Phe Pro Ile Glu Cys Gln Glu Pro Pro			
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Tyr His Ser Val Ser Thr Glu Thr Pro His Glu Arg Lys Asp Phe Glu			
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Ser Lys Ala Asn His Leu Gly Asp Ser Gly Gly Thr Pro Val Lys Thr			
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Pro Phe Gly Pro His Gln Arg Lys Arg Lys Gly His Leu Val Ser Ser			
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Glu Ser Cys Gly Lys Gly Leu Phe Phe Asn Arg Tyr Cys Xaa Leu Arg			
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Asn Lys Arg Leu Lys Leu Asp Tyr Glu Glu Ile Thr Pro Cys Leu Lys			
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Glu Val Thr Thr Val Trp Glu Lys Met Leu Ser Thr Pro Gly Arg Ser			
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Lys Ile Lys Phe Asp Met Glu Lys Met His Ser Ala Val Gly Gln Gly			
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Val Pro Arg His His Arg Gly Glu Ile Trp Lys Phe Leu Ala Glu Gln			
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Phe His Leu Lys His Gln Phe Pro Ser Lys Gln Gln Pro Lys Asp Val			
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Pro Tyr Lys Glu Leu Leu Lys Gln Leu Thr Ser Gln Gln His Ala Ile			
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Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val			
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Ala Gly Ile Leu Leu Leu His Met Ser Glu Glu Ala Phe Lys Met			
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Leu Lys Phe Leu Met Phe Asp Met Gly Leu Arg Lys Gln Tyr Arg Pro			
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Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu			
755	760	765	
His Asp Tyr His Arg Asp Leu Tyr Asn His Leu Glu Glu His Glu Ile			
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Gly Pro Ser Leu Tyr Ala Ala Pro Trp Phe Leu Thr Met Phe Ala Ser			
785	790	795	800
Gln Phe Pro Leu Gly Phe Val Ala Arg Val Phe Asp Met Ile Phe Leu			
805	810	815	
Gln Gly Thr Glu Val Ile Phe Lys Val Ala Leu Ser Leu Leu Gly Ser			

820	825	830
His Lys Pro Leu Ile Leu Gln His	Glu Asn Leu Glu Thr Ile Val Asp	
835	840	845
Phe Ile Lys Ser Thr Leu Pro Asn Leu Gly Leu Val Gln Met Glu Lys		
850	855	860
Thr Ile Asn Gln Val Phe Glu Met Asp Ile Ala Lys Gln Leu Gln Ala		
865	870	880
Tyr Glu Val Glu Tyr His Val Leu Gln Glu Glu Leu Ile Asp Ser Ser		
885	890	895
Pro Leu Ser Asp Asn Gln Arg Met Asp Lys Leu Glu Lys Thr Asn Ser		
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Ser Leu Arg Lys Gln Asn Leu Asp Leu Leu Glu Gln Leu Gln Val Ala		
915	920	925
Asn Gly Arg Ile Gln Ser Leu Glu Ala Thr Ile Glu Lys Leu Leu Ser		
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Ser Glu Ser Lys Leu Lys Gln Ala Met Leu Thr Leu Glu Leu Glu Arg		
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&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;211&gt; 4130

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&lt;213&gt; Homo sapiens

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 <213> Homo sapiens

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 Thr His Asn Asp Ala Ile Gln Cys Val Ser Tyr Asn Pro Ile Thr His  
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 Gln Leu Ala Ser Cys Ser Ser Ser Asp Phe Gly Leu Trp Ser Pro Glu  
 65 70 75 80  
 Gln Lys Ser Val Ser Lys His Lys Ser Ser Ser Lys Ile Ile Cys Cys  
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 Ser Trp Thr Asn Asp Gly Gln Tyr Leu Ala Leu Gly Met Phe Asn Gly  
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 Arg Pro Gly Gly Ser Leu Ser Pro Ile Trp Ser Ile Cys Trp Asn Pro  
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 Glu Asp Val Ile Val Asn Arg Tyr Ile Gln Glu Ile Pro Ser Thr Leu  
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 Lys Ser Ala Val Tyr Ser Ser Gln Gly Ser Glu Ala Glu Glu Glu Glu  
 180 185 190  
 Pro Glu Glu Asp Asp Ser Pro Arg Asp Asp Asn Leu Glu Glu Arg  
 195 200 205  
 Asn Asp Ile Leu Ala Val Ala Asp Trp Gly Gln Lys Val Ser Phe Tyr

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Pro	Cys	Cys	Ile	Ser	Tyr	Phe	Thr	Lys	Gly	Glu	Tyr	Ile	Leu	Leu	Gly
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Pro	Asp	Ser	Asn	Tyr	Val	Val	Val	Gly	Cys	Gln	Asp	Gly	Thr	Ile	Ser
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Phe	Tyr	Gln	Leu	Ile	Phe	Ser	Thr	Val	His	Gly	Leu	Tyr	Lys	Asp	Arg
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Thr	Glu	Gln	Lys	Val	Arg	Ile	Lys	Cys	Lys	Glu	Leu	Val	Lys	Lys	Ile
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Ala	Ile	Tyr	Arg	Asn	Arg	Leu	Ala	Ile	Gln	Leu	Pro	Glu	Lys	Ile	Leu
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Ile	Tyr	Glu	Leu	Tyr	Ser	Glu	Asp	Leu	Ser	Asp	Met	His	Tyr	Arg	Val
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Lys	Glu	Lys	Ile	Ile	Lys	Lys	Phe	Glu	Cys	Asn	Leu	Leu	Val	Val	Cys
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Ala	Asn	His	Ile	Ile	Leu	Cys	Gln	Glu	Lys	Arg	Leu	Gln	Cys	Leu	Ser
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Phe	Ser	Gly	Val	Lys	Glu	Arg	Glu	Trp	Gln	Met	Glu	Ser	Leu	Ile	Arg
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Gly	Leu	Lys	Asn	Gly	Gln	Ile	Leu	Lys	Ile	Phe	Val	Asp	Asn	Leu	Phe
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Ala	Asn	Ser	Val	Ala	Trp	Asn	Thr	Gln	Cys	Glu	Asp	Met	Leu	Cys	Phe
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Ser	Gly	Gly	Gly	Tyr	Leu	Asn	Ile	Lys	Ala	Ser	Thr	Phe	Pro	Val	His
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Glu	Arg	Lys	Lys	Arg	Gly	Glu	Thr	Asn	Asp	Leu	Phe	Leu	Ala	Asp	

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Lys Ala Ile Glu Ile Cys Gly Asp His Gly Trp Val Asp Met Leu Ile		
740	745	750
Asp Ile Ala Arg Lys Leu Asp Lys Ala Glu Arg Glu Pro Leu Leu Leu		
755	760	765
Cys Ala Thr Tyr Leu Lys Lys Leu Asp Ser Pro Gly Tyr Ala Ala Glu		
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Glu Thr Gln Arg Trp Asp Glu Ala Phe Ala Leu Gly Glu Lys His Pro		
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Glu Phe Lys Asp Asp Ile Tyr Met Pro Tyr Ala Gln Trp Leu Ala Glu		
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Gln Arg Glu Ala Val Gln Val Leu Glu Gln Leu Thr Asn Asn Ala Val		
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1125	1130	1135
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Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser		
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Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu		
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Ala Thr Phe Pro Leu Pro Lys Cys Pro Ser Gly Arg Arg Gly Pro Trp		
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Glu Gly Gly Ala His Pro Trp Leu Gln Val Gly Thr Glu Ala Cys Leu		1200
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&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5923

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720

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Ser Leu Tyr Ala Pro Asp Tyr Ser Ser Arg Leu Asp Ile Val Arg Ala		
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Leu Lys		
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&lt;211&gt; 4538

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 5926

&lt;211&gt; 526

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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<213> Homo sapiens

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300  
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420

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<210> 5928  
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 <212> PRT  
 <213> Homo sapiens

<400> 5928  
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35	40	45	
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr	Gln Gln Glu Leu Glu		
50	55	60	
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln	Pro Val Ile His Ser		
65	70	75	80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp	Thr Thr Ser Lys Ala		
85	90	95	
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu	Leu Gln Glu Lys Gly		
100	105	110	
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn	Leu Tyr Tyr Val Thr		
115	120	125	
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His	Arg Ile Ile Gln Gln		
130	135	140	
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly	Cys His Phe Leu His		
145	150	155	160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro	Gly Leu Ser Glu Ala		
165	170	175	
Val Leu Gln Gln Val Leu Glu Leu Asp Gln Ser	Asp Ile Val		
180	185	190	
Ser Thr Met Glu His Tyr Tyr Thr Ala Phe			
195	200		

&lt;210&gt; 5929

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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606

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<211> 144  
<212> PRT  
<213> Homo sapiens

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Lys Glu Pro Leu Gly Arg Ala Glu Arg Pro Gly Arg Pro Cys Thr Arg  
35 40 45  
Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys  
50 55 60  
Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr  
65 70 75 80  
His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn  
85 90 95  
Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile  
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Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg  
115 120 125  
Gly Ala His Ala  
130 135 140

<210> 5931  
<211> 478  
<212> DNA  
<213> Homo sapiens

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120  
aggctcctaa acaggtaccg ccaggctgg agcagtgggc caggaaattc tcagaacagc  
180  
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240  
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300  
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360  
gtggcctgtc catcccatct cattcttctg agttgacaga gcagaagctt cgtgcctgtt  
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478

<210> 5932  
<211> 109  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 5932

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 Leu Val Gly Ser Pro Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu  
 20               25               30  
 Glu Arg Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln  
 35               40               45  
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln  
 50               55               60  
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys  
 65               70               75               80  
 Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu  
 85               90               95  
 Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Gly Thr Thr  
 100              105

&lt;210&gt; 5933

&lt;211&gt; 1953

&lt;212&gt;-DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5933

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 1860  
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<210> 5934  
 <211> 314  
 <212> PRT  
 <213> Homo sapiens

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 Ser Lys Val Arg Glu Gln Leu Glu Gln Glu Leu Glu Leu Thr Ala  
 35 40 45  
 Ser Leu Phe Glu Glu Ala His Lys Met Val Arg Glu Ala Asn Met Lys  
 50 55 60  
 Gln Ala Ala Ser Glu Lys Gln Leu Lys Glu Ala Arg Gly Lys Ile Asp  
 65 70 75 80  
 Met Leu Gln Ala Glu Val Thr Ala Leu Lys Thr Leu Val Ile Thr Ser  
 85 90 95  
 Thr Pro Ala Ser Pro Asn Arg Glu Leu His Pro Gln Leu Leu Ser Pro

100	105	110
Thr Lys Ala Gly Pro Arg Lys Gly His Ser Arg His Lys Ser Thr Ser		
115	120	125
Ser Thr Leu Cys Pro Ala Val Cys Pro Ala Ala Gly His Thr Leu Thr		
130	135	140
Pro Asp Arg Glu Gly Lys Glu Val Asp Thr Ile Leu Phe Ala Glu Phe		
145	150	155
Gln Ala Trp Arg Glu Ser Pro Thr Leu Asp Lys Thr Cys Pro Phe Leu		
165	170	175
Glu Arg Val Tyr Arg Glu Asp Val Gly Pro Cys Leu Asp Phe Thr Met		
180	185	190
Gln Glu Leu Ser Val Leu Val Arg Ala Ala Val Glu Asp Asn Thr Leu		
195	200	205
Thr Ile Glu Pro Val Ala Ser Gln Thr Leu Pro Thr Val Lys Val Ala		
210	215	220
Glu Val Asp Cys Ser Ser Thr Asn Thr Cys Ala Leu Ser Gly Leu Thr		
225	230	235
Arg Thr Cys Arg His Arg Ile Arg Leu Gly Asp Ser Lys Ser His Tyr		
245	250	255
Tyr Ile Ser Pro Ser Ser Arg Ala Arg Ile Thr Ala Val Cys Asn Phe		
260	265	270
Phe Thr Tyr Ile Arg Tyr Ile Gln Gln Gly Leu Val Arg Gln Asp Ala		
275	280	285
Glu Pro Met Phe Trp Glu Ile Met Arg Leu Arg Lys Glu Met Ser Leu		
290	295	300
Ala Lys Leu Gly Phe Phe Pro Gln Glu Ala		
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&lt;210&gt; 5935

&lt;211&gt; 2727

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5935

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 <211> 154  
 <212> PRT  
 <213> Homo sapiens

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 Asp Gln Glu Pro Pro Pro Tyr Gln Glu Gln Val Pro Val Pro Val  
 35 40 45  
 Tyr His Pro Thr Pro Ser Gln Thr Arg Leu Ala Thr Gln Leu Thr Glu  
 50 55 60  
 Glu Glu Gln Ile Arg Ile Ala Gln Arg Ile Gly Leu Ile Gln His Leu  
 65 70 75 80  
 Pro Lys Gly Val Tyr Asp Pro Gly Arg Asp Gly Ser Glu Lys Lys Ile  
 85 90 95  
 Arg Glu Cys Val Ile Cys Met Met Asp Phe Val Tyr Gly Asp Pro Ile  
 100 105 110  
 Arg Phe Leu Pro Cys Met His Ile Tyr His Leu Asp Cys Ile Asp Asp  
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 Trp Leu Met Arg Ser Phe Thr Cys Pro Ser Cys Met Glu Pro Val Asp  
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 145 150

<210> 5937  
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 <212> DNA  
 <213> Homo sapiens

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<210> 5938  
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<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5938

Met Leu Thr Arg Lys Glu Thr Glu His Val Ser Ala Leu Ile Leu Arg  
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 Ala Phe Leu Leu Thr Ile Pro Glu Asn Ala Glu Gly His Ile Ile Leu  
 20               25               30  
 Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser  
 35               40               45  
 Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met  
 50               55               60  
 Arg Leu Leu Pro Ile Lys Ser Thr Ala Leu Lys Val Ala Leu Phe  
 65               70               75               80  
 Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val  
 85               90               95  
 Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu  
 100              105              110  
 Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu  
 115              120              125  
 Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His  
 130              135              140  
 Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu  
 145              150              155              160  
 Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys  
 165              170              175  
 Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly  
 180              185              190  
 Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser  
 195              200              205  
 Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu  
 210              215              220  
 Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro  
 225              230              235              240  
 Trp Ala Leu Leu Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr  
 245              250              255  
 Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp  
 260              265              270  
 Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser  
 275              280              285  
 Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile  
 290              295              300  
 Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser  
 305              310              315              320  
 Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly  
 325              330              335  
 Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr  
 340              345              350  
 Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly  
 355              360              365  
 Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly  
 370              375              380  
 Leu Gln Val Ala Val Glu Thr Ala Asn Leu Ile Leu Asp Leu Ser Tyr  
 385              390              395              400  
 Val Ile Glu Asp Lys Asn

405

<210> 5939  
 <211> 795  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240  
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 300  
 gccatcttca aggagaacaa gcggccgtcc aaggagatgc aggtcaccat ctcgcagcag  
 360  
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 420  
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 720  
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 795

<210> 5940  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 5940  
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 Lys Lys Gln Arg Leu Val Phe Thr Asp Leu Gln Arg Arg Thr Leu Ile  
 20 25 30  
 Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr  
 35 40 45  
 Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe  
 50 55 60  
 Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser  
 65 70 75 80  
 Thr Ala Pro Gly Gly Pro Ala Gly Ala Thr Ala Thr Phe Ser Lys Ala

85

90

95

<210> 5941  
<211> 2590  
<212> DNA  
<213> Homo sapiens

<400> 5941  
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120  
gctaaggata gcacatcaga gcataacaca gtgtgagggaa aataaaagtgt acaatgacat  
180  
cttctattct ggacctaata attcaataga gaaagaacta cttgttagtca ctgtggttac  
240  
agaaggtttc atggacagcg aacataaaagc tctactagct aacaaatagg tcttaatgtat  
300  
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360  
aaaatgagtt cccttcatgg gtcacatcag caattttttt ttccccctttt gagacagagt  
420  
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480  
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540  
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660  
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720  
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780  
cggttttcta cagaggggtt caacagcatg tatattttca aagaagtctg tggc当地aaaa  
840  
gagagtttat tggtaagt ctttggcaaa tcaacttggaa aaagggtggaa ttgagaatgg  
900  
gggctgtcta gatcaggata atgttgaatt tgaccctcac ttgaggctt tgtacagagg  
960  
atgagaagac ggttaattca agggtaatc agaaattaac accaacatga cttgggtatg  
1020  
agttagatgt gaaacgtgag aaaaacatca atgatgaaat caagcttctg acttgc当地aca  
1080  
gtgagatatac caagagctac aggcttggaa gatgataaaa gttggagaca ttctgtttt  
1140  
tcatgagtgc ccatggaca gacagggaga aatggacagt tgaaagtaca agtctagaca  
1200  
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1260  
agggttctagg agtttggagac gaacctgggtt gacatagtga gagctcatct ctacaaaaa  
1320  
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1380

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 1560  
 acaacagtct atgatagttat aatccctctt ttttgtaca cagagtaaag aggacaaaata  
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 1680  
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 1860  
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 1920  
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 1980  
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 2040  
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 2160  
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 2280  
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 2400  
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 2460  
 gaaagaagat tgcttgagcc caggaattag aggctgcaat gagctatgat catgccactg  
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 2580  
 gagctttta  
 2590

<210> 5942  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 5942  
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 Arg Gln Ser Leu Ala Leu Leu Xaa Gln Val Gly Val Gln Trp His Asp  
 20 25 30  
 Pro Gly Ser Leu Gln Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys

35	40	45
Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys	Leu Ser Ser Arg	Leu
50	55	60
Ala Thr Phe Cys Ile Phe Ser Arg Asp Arg Val	Ser Pro Cys	Trp Pro
65	70	75
Gly Trp Ser Gln Thr Pro Asp Leu Lys		80
	85	

&lt;210&gt; 5943

&lt;211&gt; 781

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5943

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tgcttggatt gaattgttgg aaatgatctc gactccgcgca aactaaacc aactctggat  
120  
ggacaacttg ttgttaattgg taaggatgaa tcttatagca agacttctgg ggtttccagc  
180  
atcaccaagc ttcaaagaca accatttgg a ttgagacca agcctggaat ctttgcgt  
240  
tttcaaaaacg agtttgagaa cccttgcctt ccaaagtctc attttctgt cacccaagct  
300  
ggagagcaat ggccgcgatct cagtcacca caacccgcgctcccgatggt caagcaattc  
360  
tcctgtctca gcctcccgag tagctggac cacaggcacc cgccaccacg cccggctaac  
420  
ttttgtatTT ttagtagaga cgaggtttca ccgcggcttc gatctcctga cctcatgnna  
480  
tcggccccacc tcggcctccc aaagtgttgg gattacaggc gtgagccact ggcggccagcc  
540  
cagatcagcc ttttatttag caagtcacca tcacaagaca tacaggctaa ggcttaaaag  
600  
aagcccttgg gtttaaaaca aatgttttagg aggagatgag aagtttctca tctttatgg  
660  
ctacaaaaat catcaaaaaca aattcaggtt cagagtctag aaaagatgtt actatttgca  
720  
gcatgggtct gatacagcag ttcttaacgg gtaaactgct ttgttttaat ttatattaca  
780  
g  
781

&lt;210&gt; 5944

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5944

Ile Val Gly Asn Asp Leu Asp Ser Ala Gln Thr Lys Pro Thr	Leu Asp		
1	5	10	15
Gly Gln Leu Val Val Ile Gly Lys Asp Glu Ser Tyr Ser	Lys Thr Ser		
20	25	30	
Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe	Gly Val Glu		

35	40	45
Thr Lys Pro Gly Ile Leu Cys Cys Phe Gln Asn Glu Phe Glu Asn Pro		
50	55	60
Cys Phe Pro Lys Ser His Phe Ser Val Thr Gln Ala Gly Glu Gln Trp		
65	70	75
Arg Asp Leu Ser Ser Pro Gln Pro Pro Pro Arg Phe Lys Gln Phe		80
85	90	95
Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp His Arg His Pro Pro Pro		
100	105	110
Arg Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Glu Val Ser Pro Arg		
115	120	125
Ser Arg Ser Pro Asp Leu Met Xaa Ser Ala His Leu Gly Leu Pro Lys		
130	135	140
Cys Trp Asp Tyr Arg Arg Glu Pro Leu Arg Pro Ala Gln Ile Ser Leu		
145	150	155
Leu Phe Ser Lys Ser Pro Ser Gln Asp Ile Gln Ala Lys Ala		160
165	170	

&lt;210&gt; 5945

&lt;211&gt; 869

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 5945  
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 120  
 tggatgagtt aatgggccgg gaccgaaacc tagccccgga cgagaagcgc agcaacgtgc  
 180  
 ggtgggacca cgagagcgtt tgtaaatatt atctctgtgg tttttgtcct gcggaattgt  
 240  
 tcacaaaatac acgttctgat cttgatgtat ttggaagagg agataaacatt agagatgtca  
 300  
 gcaaattttt ggaagatgac aagtggatgg aggagtagca gcaaacgcaa cagagcagag  
 360  
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 420  
 cagaaccctg gacaggctca ggatttggag gcaccaggca gaagaaaaga ggattttct  
 480  
 ctagagaaaag tgaacagttc ctgagaagtg atctctgcag gtccgtgtga aaaaattcat  
 540  
 gataaaaatc tacaaaaaca gatatgagaag agctctcggt tcatgaaagt tggctatgag  
 600  
 agagattttt tgcgataactt acagagctta cttgcagaag tagaacgttag gatcagacga  
 660  
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 720  
 ggcaaaaaatg gagaaaaaat tcaggttcta acagacaaaa ttgatgtact tctgcaacag  
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 869

<210> 5946  
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<212> PRT  
<213> Homo sapiens

<400> 5946  
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Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val Glu Arg  
35 40 45  
Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln  
50 55 60  
Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln  
65 70 75 80  
Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Ile Glu Glu Leu  
85 90 95  
Gly Ser Glu Gly Lys Val Glu Glu Ala Gin Gly Met Met Lys Leu Val  
100 105 110  
Glu Gln Leu Lys Glu Glu Arg Glu Leu  
115 120

<210> 5947  
<211> 2283  
<212> DNA  
<213> Homo sapiens

<400> 5947  
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cgagatggac tagccccaga aaagacatca ccagatagag ataagaaaaa agagcagtca  
120  
gaagtatctg ttctccctag agcttcaaaa catcattatt caagatcacg atcaaggta  
180  
agagaaagaa aacgaaagtc agataatgaa ggaagaaaac acaggagccg gagcagaagc  
240  
aaagagcgtg cttatgcgcg aagagactga actgaagacg ctgcagactc agatagcaa  
300  
ataataagcc tacttcatga tnnaagaacc aacttcttct taaaacaggg aagaagacat  
360  
gaatccaaag ataaatcctc taagaaaacat aagtctgagg aacataatga caaagaacat  
420  
tcttctgata aaggaagaga gcgactaaat tcatctgaaa atggtgagga caggcacaaa  
480  
cgcaaaagaaa gaaaagtcattc aagaggcaga agtcactcaa gatcttaggtc tcgtgaaaga  
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660  
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720

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780  
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840  
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900  
gaaaaggaaaa tggttgaaaa acaaaaacaa caagaaatag ctgcagcagc tgcagctact  
960  
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atagccatgg cagctcagat ggcagccctg caagctaaag ctttggcaga gacaggaata  
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1140  
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1200  
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1260  
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1380  
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1440  
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1500  
cacgtcccttgc ttccaccaaac agcttagcact cttagcttgc tgggtgttgc attgacttta  
1560  
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1620  
taatcaggtt aaacccactt ccattaaact tgacaggact atagaaggat aatattttt  
1680  
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1740  
atggattttt tcgtgtccgc tgtcttgtt acttttgc ttaaccttgc acagttttt  
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1860  
ggtacataat ccagcacaga taagctgggt ggtaatgata ataaaaatgg ttttctcaaa  
1920  
actgggttta atttaagtta cctgggtatgt ttctttgaat ttgtttata gtttctgttag  
1980  
catttggcaa ttgtgttag aaaacactag cttagaaatcc cctccccacc accctttta  
2040  
aggccagtttta actataactac agtcaataacc gtgggtgagca aaaatgtaaa aggtgaaagg  
2100  
agaaaaacttta cttaaatagt atgtttccctt attataaggg acagacttgg tattcagtat  
2160  
ttgtcaataata ttacatgtgt tattcaggag atagattaat gcattaaagg gatgtaaagca  
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2280  
aaa  
2283

<210> 5948  
<211> 76  
<212> PRT  
<213> Homo sapiens

<400> 5948  
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Ser Pro Asp Arg Asp Lys Lys Glu Gln Ser Glu Val Ser Val Ser  
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Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg  
35 40 45  
Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg  
50 55 60  
Ser Arg Ser Lys Glu Arg Ala Tyr Ala Arg Arg Asp  
65 70 75

<210> 5949  
<211> 4706  
<212> DNA  
<213> Homo sapiens

<400> 5949  
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120  
gcgggttaggc cggttagggcc tgccgtccgg cctgcgggag aactgggtcg tcagtcctcc  
180  
gagtgggtgg gctggggact ttgaggggagt tggctctagg gcacagtcggcc  
240  
ggtcggagga acaagtgctg ggatctggcg tgggtgtcc aggggtcttt tccgcggccc  
300  
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360  
tttgttctcg tgggtgttga tgccgaggaa agactctggg ccccaggact cacctaaact  
420  
ggagttcgaa tactgttcgc tcgctgtgtg accttggaaa aaataacaag cttttctgaa  
480  
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600  
agacacctcgag agcatggttc atcgatagag cccgtcaggc acgagaagaa aggcttgtgc  
660  
agaaggaacg ggagcggca gctgtgtga tccaggccca tgtccggagt tttctctgtc  
720  
ggagtcgact gcagagagat atcaggagag agattgatga cttttttaaa gcagatgacc  
780  
ctgagtcac taaaagaagt gcactttgttga tttcaagat tgccaggaaa ctgctgttcc  
840  
tattcagaat caaagaggat aatgagagat ttgagaagtt gtgtcgccgc atcctgagca  
900

gcatggatgc tgagaatgag cctaagggtgt ggtatgtgtc cctggcttgc tctaaggacc  
960  
tcaccctccct ttggattcaa cagatcaaga acatttgtg gtactgctgt gatttctca  
1020  
agcagctcaa gcctgaaatc ctgcaggact cccgactcat caccctgtac ctcacgatgc  
1080  
ttgtcacctt cacagacact tcaacgtgga aaattcttcg gggaaaagggt gaaagtcttc  
1140  
gaccagcgat gaaccacatt tgtgcaaata taatggaca tctcaaccag catggatttt  
1200  
attctgtgct gcagatattt ttaaccgtg gcctggcaag accccgtcct tgtctatcca  
1260  
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<210> 5950  
 <211> 397  
 <212> PRT  
 <213> Homo sapiens

<400> 5950  
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 His Ala Met Lys Gly Val Ile Arg Val Lys Phe Val Asn Asp Leu Gly  
 35 40 45  
 Val Asp Glu Ala Gly Ile Asp Gln Asp Gly Val Phe Lys Glu Phe Leu  
 50 55 60  
 Glu Glu Ile Ile Lys Arg Val Phe Asp Pro Ala Leu Asn Leu Phe Lys  
 65 70 75 80  
 Thr Thr Ser Gly Asp Glu Arg Leu Tyr Pro Ser Pro Thr Ser Tyr Ile  
 85 90 95  
 His Glu Asn Tyr Leu Gln Leu Phe Glu Phe Val Gly Lys Met Leu Gly  
 100 105 110  
 Lys Ala Val Tyr Glu Gly Ile Val Val Asp Val Pro Phe Ala Ser Phe  
 115 120 125  
 Phe Leu Ser Gln Leu Leu Gly His His Ser Val Phe Tyr Ser Ser  
 130 135 140  
 Val Asp Glu Leu Pro Ser Leu Asp Ser Glu Phe Tyr Lys Asn Leu Thr  
 145 150 155 160  
 Ser Ile Lys Arg Tyr Asp Gly Asp Ile Thr Asp Leu Gly Leu Thr Leu  
 165 170 175  
 Ser Tyr Asp Glu Asp Val Met Gly Gln Leu Val Cys His Glu Leu Ile  
 180 185 190  
 Pro Gly Gly Lys Thr Ile Pro Val Thr Asn Glu Asn Lys Ile Ser Tyr  
 195 200 205  
 Ile His Leu Met Ala His Phe Arg Met His Thr Gln Ile Lys Asn Gln

210	215	220
Thr Ala Ala Leu Ile Ser Gly Phe Arg Ser Ile Ile Lys Pro Glu Trp		
225	230	235
Ile Arg Met Phe Ser Thr Pro Glu Leu Gln Arg Leu Ile Ser Gly Asp		240
245	250	255
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		
260	265	270
Gly Gly Phe His Gly Ser His Arg Val Ile Trp Leu Trp Asp Ile		
275	280	285
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		
290	295	300
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		
305	310	315
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
325	330	335
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		
340	345	350
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		
355	360	365
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		
370	375	380
Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		
385	390	395

&lt;210&gt; 5951

&lt;211&gt; 1724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5951

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 600  
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 660  
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 720

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 780  
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 840  
 aactattatc cctacacaat tacagaatac acatgttcct ttctgccaa attctccatt  
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 1320  
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 1560  
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 1620  
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<210> 5952  
 <211> 378  
 <212> PRT  
 <213> Homo sapiens

<400> 5952  
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 20 25 30  
 Ala Pro Arg Phe Pro Pro Gly Gly Phe Ala Ala Gly Arg Thr Met Leu  
 35 40 45  
 Leu Lys Glu Tyr Arg Ile Cys Met Pro Leu Thr Val Asp Glu Tyr Lys  
 50 55 60  
 Ile Gly Gln Leu Tyr Met Ile Ser Lys His Ser His Glu Gln Ser Asp  
 65 70 75 80  
 Arg Gly Glu Gly Val Glu Val Val Gln Asn Glu Pro Phe Glu Asp Pro  
 85 90 95  
 His His Gly Asn Gly Gln Phe Thr Glu Lys Arg Val Tyr Leu Asn Ser

100	105	110
Lys Leu Pro Ser Trp Ala Arg Ala Val Val Pro Lys Ile Phe Tyr Val		
115	120	125
Thr Glu Lys Ala Trp Asn Tyr Tyr Pro Tyr Thr Ile Thr Glu Tyr Thr		
130	135	140
Cys Ser Phe Leu Pro Lys Phe Ser Ile His Ile Glu Thr Lys Tyr Glu		
145	150	155
Asp Asn Lys Gly Ser Asn Asp Thr Ile Phe Asp Asn Glu Ala Lys Asp		
165	170	175
Val Glu Arg Glu Val Cys Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro		
180	185	190
Glu Arg Tyr Tyr Lys Glu Ser Glu Asp Pro Lys His Phe Lys Ser Glu		
195	200	205
Lys Thr Gly Arg Gly Gln Leu Arg Glu Gly Trp Arg Asp Ser His Gln		
210	215	220
Pro Ile Met Cys Ser Tyr Lys Leu Val Thr Val Lys Phe Glu Val Trp		
225	230	235
Gly Leu Gln Thr Arg Val Glu Gln Phe Val His Lys Val Val Arg Asp		
245	250	255
Ile Leu Leu Ile Gly His Arg Gln Ala Phe Ala Trp Val Asp Glu Trp		
260	265	270
Tyr Asp Met Thr Met Asp Glu Val Arg Glu Phe Glu Arg Ala Thr Gln		
275	280	285
Glu Ala Thr Asn Lys Lys Ile Gly Ile Phe Pro Pro Ala Ile Ser Ile		
290	295	300
Ser Ser Ile Pro Leu Leu Pro Ser Ser Val Arg Ser Ala Pro Ser Ser		
305	310	315
Ala Pro Ser Thr Pro Leu Ser Thr Asp Ala Pro Glu Phe Leu Ser Val		
325	330	335
Pro Lys Asp Arg Pro Arg Lys Ser Ala Pro Glu Thr Leu Thr Leu		
340	345	350
Pro Asp Pro Glu Lys Lys Ala Thr Leu Asn Leu Pro Gly Met His Ser		
355	360	365
Ser Asp Lys Pro Cys Arg Pro Lys Ser Glu		
370	375	

<210> 5953  
<211> 777  
<212> DNA  
<213> Homo sapiens

<400> 5953  
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120  
cgggacagggc tcctaaacag gtaccgccag ctngaaagca gtggggcagg gaatttctcag  
180  
aacagctttc tagttcaaga ggtgatggaa gaagagtggaa atgctttgca gtcagtggag  
240  
aattgtccag aagacttggc tcagctggag gagctgtatg acatggctgt gctggaggaa  
300  
attcaacagg agctgatcaa ccaagagcag tccatcatca gcgagtatga gaagagcttg  
360

cagtttgatg aaaagtgtct cagcatcatg ctggctgagt gggaggcaaa cccactcatc  
 420  
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 480  
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 540  
 gcctttatt tataacttat tttgtattga aactttaaa caatactgaa gaaaaaaaaa  
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 660  
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 720  
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 777

&lt;210&gt; 5954

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 5954  
 Phe Arg His Glu Ala Arg Ser Arg Lys Arg Ser Pro Arg Arg Ser Leu  
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 Tyr Lys Leu Val Gly Ser Pro Pro Trp Lys Glu Ala Phe Arg Gln Arg  
 20               25                           30  
 Cys Leu Glu Arg Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr  
 35               40                           45  
 Arg Gln Leu Xaa Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu  
 50               55                           60  
 Val Gln Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu  
 65               70                           75                           80  
 Asn Cys Pro Glu Asp Leu Ala Gln Leu Glu Leu Ile Asp Met Ala  
 85               90                           95  
 Val Leu Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile  
 100              105                           110  
 Ile Ser Glu Tyr Glu Lys Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser  
 115              120                           125  
 Ile Met Leu Ala Glu Trp Glu Ala Asn Pro Leu Ile Cys Pro Val Cys  
 130              135                           140  
 Thr Lys Pro Val Ile Leu Gly Leu  
 145              150

&lt;210&gt; 5955

&lt;211&gt; 1459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 5955  
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 120  
 gctcagccctg tgatctgtat ccactcagca tgcaacttggg cagatgattt gtctgtgtgc  
 180

tacccttccc cccatattac catacatatg cacggcggga ccagcagcga cgtagcagc  
240  
agcatggccg cgatctatgg gggtagag ggggaggca cacgatccga ggtccttta  
300  
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360  
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420  
gcagggggtgg atccctgtgt accgcgtgega agcttgggcc tatctctgag cggtggggac  
480  
caggaggacg cggggaggat cctgatcgag gagctgaggg accgatttcc ctacctgagt  
540  
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600  
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660  
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720  
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780  
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840  
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960  
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1260  
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1320  
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aaaaaaaaaa aagtgcacg  
1459

<210> 5956  
<211> 431  
<212> PRT  
<213> Homo sapiens

<400> 5956  
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Arg Phe Lys Ala Leu Pro Pro Gly	Ala Gln Pro Val Ile Cys Ile His	
35	40	45
Ser Ala Cys Thr Trp Ala Asp Asp	Leu Ser Val Cys Tyr Pro Ser Pro	
50	55	60
His Ile Thr Ile His Met His Gly	Gly Thr Ser Ser Asp Gly Ser Ser	
65	70	75
Ser Met Ala Ala Ile Tyr Gly	Gly Val Glu Gly Gly Thr Arg Ser	
85	90	95
Glu Val Leu Leu Val Ser Glu Asp	Gly Lys Ile Leu Ala Glu Ala Asp	
100	105	110
Gly Leu Ser Thr Asn His Trp	Leu Ile Gly Thr Asp Lys Cys Val Glu	
115	120	125
Arg Ile Asn Glu Met Val Asn	Arg Ala Lys Arg Lys Ala Gly Val Asp	
130	135	140
Pro Leu Val Pro Leu Arg Ser	Leu Gly Leu Ser Leu Ser Gly Gly Asp	
145	150	155
Gln Glu Asp Ala Gly Arg Ile	Leu Ile Glu Glu Leu Arg Asp Arg Phe	
165	170	175
Pro Tyr Leu Ser Glu Ser Tyr	Leu Ile Thr Thr Asp Ala Ala Gly Ser	
180	185	190
Ile Ala Thr Ala Thr Pro Asp	Gly Gly Val Val Leu Ile Ser Gly Thr	
195	200	205
Gly Ser Asn Cys Arg Leu Ile Asn	Pro Asp Gly Ser Glu Ser Gly Cys	
210	215	220
Gly Gly Trp Gly His Met Met	Gly Asp Glu Gly Ser Ala Leu Ser Ala	
225	230	235
Pro Ser Ala Tyr Trp Ile Ala His	Gln Ala Val Lys Ile Val Phe Asp	
245	250	255
Ser Ile Asp Asn Leu Glu Ala	Ala Pro His Asp Ile Gly Tyr Val Lys	
260	265	270
Gln Ala Met Phe His Tyr Phe	Gln Val Pro Asp Arg Leu Gly Ile Leu	
275	280	285
Thr His Leu Tyr Arg Asp Phe	Asp Lys Cys Arg Phe Ala Gly Phe Cys	
290	295	300
Arg Lys Ile Ala Glu Ala Gln	Gln Gly Asp Pro Leu Ser Arg Tyr	
305	310	315
Ile Phe Arg Lys Ala Gly Glu	Met Leu Gly Arg His Ile Val Ala Val	
325	330	335
Leu Pro Glu Ile Asp Pro Val	Leu Phe Gln Gly Lys Ile Gly Leu Pro	
340	345	350
Ile Leu Cys Val Gly Ser Val	Trp Lys Ser Trp Glu Leu Leu Lys Glu	
355	360	365
Gly Phe Leu Leu Ala Leu	Thr Gln Gly Arg Glu Ile Gln Ala Gln Asn	
370	375	380
Phe Phe Ser Ser Phe Thr	Leu Met Lys Leu Arg His Ser Ser Ala Leu	
385	390	395
Gly Gly Ala Ser Leu Gly Ala Arg	His Ile Gly His Leu Leu Pro Met	
405	410	415
Asp Tyr Ser Ala Asn Ala Ile	Ala Phe Tyr Ser Tyr Thr Phe Ser	
420	425	430

<210> 5957  
<211> 855

<212> DNA  
<213> Homo sapiens

<400> 5957  
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120  
ctaaacaggt accgccaggc tggaagcagt gggccaggga attctcagaa cagtttcta  
180  
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240  
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300  
360  
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720  
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<210> 5958  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 5958  
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Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly  
35 40 45  
Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val  
50 55 60  
Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys Pro Glu  
65 70 75 80  
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85 90 95  
Ile Gln Gln Glu Leu Ile Asn Gln Gly Leu

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105

<210> 5959  
<211> 830  
<212> DNA  
<213> Homo sapiens

<400> 5959  
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120  
ctatatgtatg acaatctttt ctgtcattttt gtggatgaag tactcttggtt tgaaaggag  
180  
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240  
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300  
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360  
gaaatgaaag ttccagatgttgcagaaaact ttatgactc tactcttgggt tataactgac  
420  
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480  
tttagtagatg atttttagat acgattaaca caagtgtatgaaagaagagac tagagcttcc  
540  
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600  
gattgggctg acaatgtttt ctttctacaa ctcaacagg ctgcactggaa ggtgtttgca  
660  
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720  
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830

<210> 5960  
<211> 251  
<212> PRT  
<213> Homo sapiens

<400> 5960  
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20 25 30  
Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn  
35 40 45  
Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr  
50 55 60  
Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser  
65 70 75 80  
Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

85	90	95
Met Lys Val Pro Asp Cys Ala Glu Thr Phe Met Thr Leu Leu Leu Val		
100	105	110
Ile Thr Asp Arg Tyr Lys Asn Leu Pro Thr Ala Ser Arg Lys Leu Gln		
115	120	125
Phe Leu Glu Leu Gln Lys Asp Leu Val Asp Asp Phe Arg Ile Arg Leu		
130	135	140
Thr Gln Val Met Lys Glu Glu Thr Arg Ala Ser Leu Gly Phe Arg Tyr		
145	150	155
Cys Ala Ile Leu Asn Ala Val Asn Tyr Ile Ser Thr Val Leu Ala Asp		
165	170	175
Trp Ala Asp Asn Val Phe Phe Leu Gln Leu Gln Ala Ala Leu Glu		
180	185	190
Val Phe Ala Glu Asn Asn Thr Leu Ser Lys Leu Gln Leu Gly Gln Leu		
195	200	205
Ala Ser Met Glu Ser Ser Val Phe Asp Asp Met Ile Asn Leu Leu Glu		
210	215	220
Arg Leu Lys His Asp Met Leu Thr Arg Gln Val Asp His Val Phe Arg		
225	230	235
Glu Val Lys Asp Ala Ala Lys Leu Tyr Lys Lys		
245	250	

&lt;210&gt; 5961

&lt;211&gt; 585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5961

```

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420
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480
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585

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&lt;210&gt; 5962

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 5962  
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 Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser  
 20 25 30  
 Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu  
 35 40 45  
 Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro  
 50 55 60  
 Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe  
 65 70 75 80  
 Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln  
 85 90 95  
 Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala  
 100 105 110  
 Pro Ser

<210> 5963  
<211> 1288  
<212> DNA  
<213> Homo sapiens

<400> 5963  
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 120  
 gaagaaaaag tgaaacgatc tgtgaaagat gctgccaaga agggccagaa ggatgtctgc  
 180  
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 240  
 aaagcacaca tgaactcagt gtcatgggg atgaagaacc agctcgccgt cttgcgagtg  
 300  
 360  
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 420  
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 720  
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 1080  
 agattgcttc atttgcgtgg tggaaaga gttgctatgg ccaggcatat gggatttgg  
 1140  
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 1200  
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 1260  
 ctgttggctg gtggctgcat tatgtccg  
 1288

&lt;210&gt; 5964

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 Asn Glu Trp Ser Leu Lys Ile Arg Lys Glu Met Arg Val Val Asp Arg  
 20 25 30  
 Gln Ile Arg Asp Ile Gln Arg Glu Glu Glu Lys Val Lys Arg Ser Val  
 35 40 45  
 Lys Asp Ala Ala Lys Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala  
 50 55 60  
 Lys Glu Met Ile Arg Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser  
 65 70 75 80  
 Lys Ala His Met Asn Ser Val Leu Met Gly Met Lys Asn Gln Leu Ala  
 85 90 95  
 Val Leu Arg Val Ala Gly Ser Leu Gln Lys Ser Thr Glu Val Met Lys  
 100 105 110  
 Ala Met Gln Ser Leu Val Lys Ile Pro Glu Ile Gln Ala Thr Met Arg  
 115 120 125  
 Glu Leu Ser Lys Glu Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu  
 130 135 140  
 Glu Asp Thr Phe Glu Ser Met Asp Asp Gln Glu Glu Met Glu Glu  
 145 150 155 160  
 Ala Glu Met Glu Ile Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala  
 165 170 175  
 Leu Gly Lys Ala Pro Ser Lys Val Thr Asp Ala Leu Pro Glu Pro Glu  
 180 185 190  
 Pro Pro Gly Ala Met Ala Ala Ser Glu Asp Glu Glu Glu Glu Glu  
 195 200 205  
 Ala Leu Glu Ala Met Gln Ser Arg Leu Ala Thr Leu Arg Ser  
 210 215 220

&lt;210&gt; 5965

&lt;211&gt; 1011

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 180  
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 240  
 gagtggaatg ctttcagnn tcagtggnn aattgtccag aagacttggc tcagttggag  
 300  
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag  
 360  
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 420  
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 480  
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 600  
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 720  
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 780  
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 840  
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 900  
 aactgccttg gaggagataa accaattttt tgccttatcat gttatacaaaa aatctagaaaa  
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<210> 5965  
 <211> 233  
 <212> PRT  
 <213> Homo sapiens

<400> 5966  
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 20 25 30  
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn  
 35 40 45  
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly  
 50 55 60  
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu  
 65 70 75 80  
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

85	90	95
Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu Glu Glu Ile Gln		
100	105	110
Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile Ile Ser Glu Tyr Glu Lys		
115	120	125
Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser Ile Met Leu Ala Glu Trp		
130	135	140
Glu Ala Asn Pro Leu Ile Cys Pro Val Cys Thr Lys Tyr Asn Leu Arg		
145	150	155
Ile Thr Ser Gly Val Val Val Cys Gln Cys Gly Leu Ser Ile Pro Ser		
165	170	175
His Ser Ser Glu Leu Thr Glu Gln Lys Leu Arg Ala Cys Leu Glu Gly		
180	185	190
Ser Ile Asn Glu His Ser Ala His Cys Pro His Thr Pro Glu Phe Ser		
195	200	205
Val Thr Gly Gly Thr Glu Glu Lys Ser Ser Leu Leu Met Ser Cys Leu		
210	215	220
Ala Cys Asp Thr Trp Ala Val Ile Leu		
225	230	

&lt;210&gt; 5967

&lt;211&gt; 1806

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5967

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 180  
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 240  
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 300  
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 360  
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 420  
 gacaacaact cttccaacaa ttcttaattcc agtaacgggg actcagattc caataggcaa  
 480  
 aqgtgtctcag aatgcaaagt atggcggaaat ccactaaatt tatttagggg tgctgaatac  
 540  
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 660  
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 720  
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 840

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 1260  
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 1620  
 caggttggta ctgcatgcct tgcctcattt cacaacaaat tcttagcagt ttccaaaaaa  
 1680  
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 1800  
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 1806

<210> 5968  
 <211> 434  
 <212> PRT  
 <213> Homo sapiens

<400> 5968  
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 20 25 30  
 Gly Thr Ser Ser Leu Ile Ser Gly Leu Ile Leu Ile Phe Glu Trp Trp  
 35 40 45  
 Tyr Phe Arg Lys Tyr Gly Thr Ser Phe Ile Glu Gln Val Ser Val Ser  
 50 55 60  
 His Leu Arg Pro Leu Leu Gly Gly Val Asp Asn Asn Ser Ser Asn Asn  
 65 70 75 80  
 Ser Asn Ser Ser Asn Gly Asp Ser Asp Ser Asn Arg Gln Ser Val Ser  
 85 90 95  
 Glu Cys Lys Val Trp Arg Asn Pro Leu Asn Leu Phe Arg Gly Ala Glu

100	105	110
Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr		
115	120	125
Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp		
130	135	140
Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg		
145	150	155
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu		
165	170	175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala		
180	185	190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu		
195	200	205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr		
210	215	220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala		
225	230	235
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala		
245	250	255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile		
260	265	270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu		
275	280	285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp		
290	295	300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg		
305	310	315
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe		
325	330	335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr		
340	345	350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His		
355	360	365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe		
370	375	380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His		
385	390	395
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys		
405	410	415
Leu Glu Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys		
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Ala Ala		

<210> 5969  
<211> 429  
<212> DNA  
<213> Homo sapiens

<400> 5969  
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120

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 180  
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 429

<210> 5970  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 5970  
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 Gln Asn Gly Gln Leu Gly Gly Glu Gly Val Pro Asp Leu Gln Pro  
 20               25                   30  
 Gly Val Leu Ala Ser Gln Ala Met Ile Glu Lys Ile Leu Ser Glu Asp  
 35               40                   45  
 Pro Arg Trp Gln Asp Ala Asn Phe Val Leu Gly Ser Tyr Lys Thr Glu  
 50               55                   60  
 Gln Cys Pro Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro  
 65               70                   75                   80  
 His Tyr His Asn Ser Arg Asp Arg Arg Asn Pro Arg Arg Phe Gln  
 85               90                   95  
 Tyr Arg Ser Thr Pro Cys Pro Ser Val Lys His Gly Asp Glu Trp Gly  
 100              105                   110  
 Glu Pro Ser Arg Cys Asp Gly Gly Asp Gly Cys Gln Tyr Cys His Ser  
 115              120                   125  
 Arg Thr Glu Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys  
 130              135                   140

<210> 5971  
 <211> 565  
 <212> DNA  
 <213> Homo sapiens

<400> 5971  
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 120  
 catgtccctt aggtcagcta agcccacatc agtgtccaaa taggcaacat ccctattta  
 180  
 tagatggta tccccatttt agagatactt ccctttata tccccatttt acaggtgaag  
 240  
 gaattgaggc acagaaggtt aggtcacttc tgcaagatga ccagctgaac caaaattca  
 300

gggcttcaaa caccaaatgt gttcccttgc ctccgtttc ccacttgctt cccagaggct  
 360  
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 420  
 cccaggactg tggccgtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc  
 480  
 cacacctacc ctcagecctt aagctgcagc aatggctgct tccagatgag cacaccctcg  
 540  
 gggtgtcangc gtccagtgtc acgat  
 565

&lt;210&gt; 5972

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 5972  
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 Arg Asp Ser Ser Leu Leu Tyr Pro His Phe Thr Gly Glu Gly Ile Glu  
 35 40 45  
 Ala Gln Lys Val Arg Ser Leu Leu Gln Asp Asp Gln Leu Asn Gln Asn  
 50 55 60  
 Phe Arg Ala Ser Asn Thr Lys Cys Val Pro Leu Ser Ser Val Ser His  
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&lt;210&gt; 5973

&lt;211&gt; 797

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 <211> 107  
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 <213> Homo sapiens

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 35 40 45  
 Pro His Pro Gly Leu Ser Pro Thr Ser Gly Thr Leu Met Pro Gly Arg  
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 Arg Arg Gly Gly Pro Ser Phe Gly Thr Pro Ala Leu Arg Arg Arg Lys  
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 <211> 2175  
 <212> DNA  
 <213> Homo sapiens

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 <211> 564  
 <212> PRT  
 <213> Homo sapiens

<400> 5976  
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 Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val Ser  
 65 70 75 80  
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 Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro Trp  
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 Glu Glu Glu Ile Asp Phe Leu Arg Ser Asn Pro Lys Ile Trp Asn Val  
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 260 265 270  
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Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His		
420	425	430
Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser		
435	440	445
Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu		
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Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp		
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Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile		
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His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile		
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Arg Gln Ile His Lys Phe Glu Glu Leu Asn Arg Thr Leu Lys Lys Met		
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&lt;210&gt; 5977

&lt;211&gt; 2320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 5977

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 <211> 77  
 <212> PRT  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

<400> 5980  
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 35               40               45  
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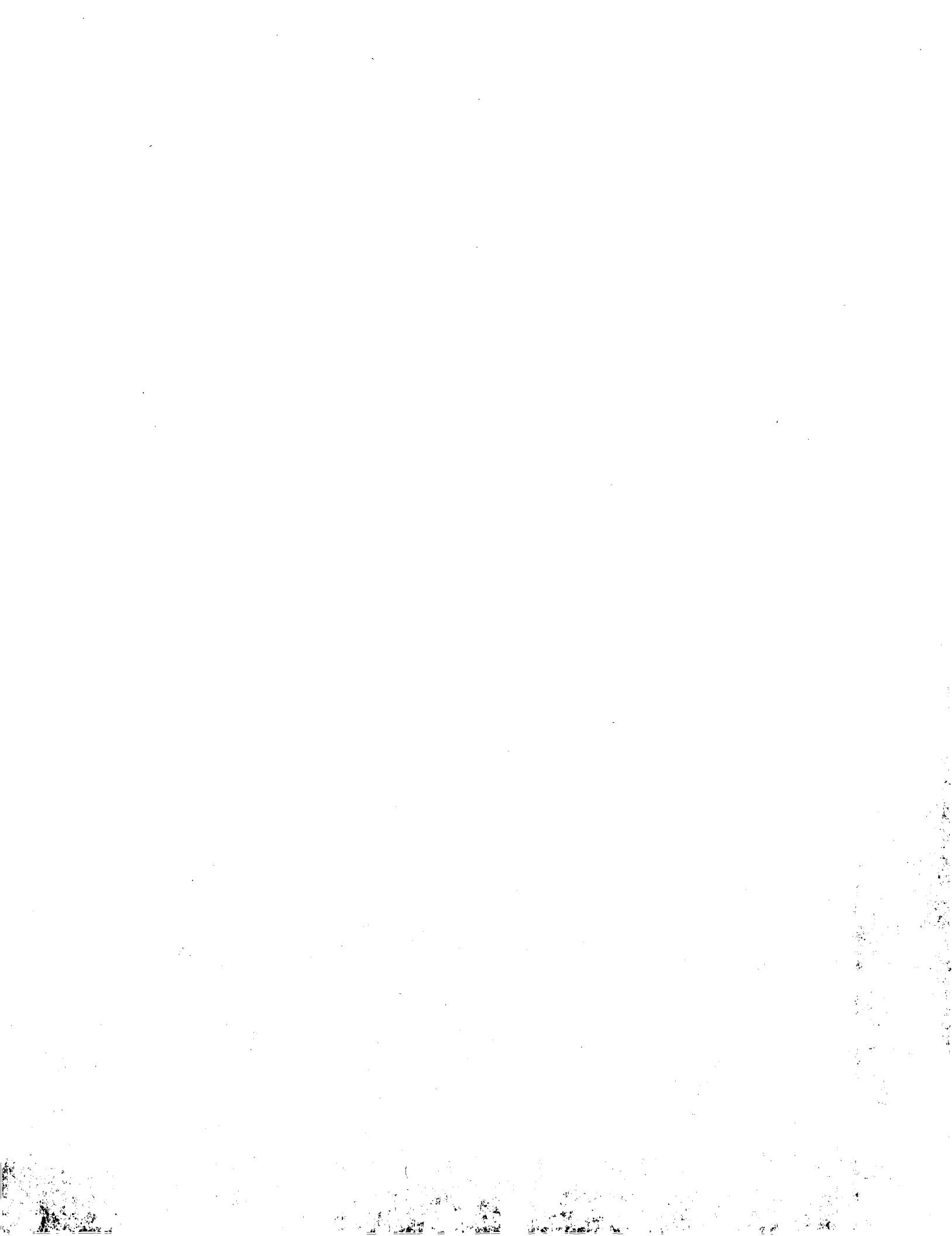
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 <212> DNA  
 <213> Homo sapiens

<400> 5981  
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 Glu Thr Pro Pro Asp Ala Leu Ile Leu Glu Ser Pro Phe Thr Asn Ile  
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 Arg Glu Glu Ala Lys Ser His Pro Phe Ser Val Ile Tyr Arg Tyr Phe  
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 Pro Gly Phe Asp Trp Phe Phe Leu Asp Pro Ile Thr Ser Ser Gly Ile  
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 Ile Leu His Ala Glu Asp Asp Pro Val Val Pro Phe Gln Leu Gly Arg  
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<400> 5989

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7500  
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7560

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 7680  
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 7740  
 gctttgtacc tcaagaggta catgagcatg ttgtggataa atgtaaattn tagtcaaagt  
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<210> 5994  
 <211> 402  
 <212> PRT  
 <213> Homo sapiens

<400> 5994  
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 Asp Glu Leu Pro Glu Ala Pro Pro Lys Thr Arg Glu Ser Asp His Ser  
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 Arg Ser Ser Ser Pro Thr Ala Gly Pro Ser Thr Glu Gly Ala Glu Gly  
 35 40 45  
 Pro Glu Glu Lys Lys Val Lys Met Arg Arg Lys Arg Arg Leu Pro  
 50 55 60  
 Asn Lys Glu Leu Ser Arg Glu Leu Ser Lys Glu Leu Asn His Glu Ile  
 65 70 75 80  
 Gln Arg Thr Glu Asn Ser Leu Ala Asn Glu Asn Gln Pro Ile Lys  
 85 90 95  
 Ser Glu Pro Glu Ser Glu Gly Glu Glu Pro Lys Arg Pro Pro Gly Ile  
 100 105 110  
 Cys Glu Arg Pro His Arg Phe Ser Lys Gly Leu Asn Gly Thr Pro Arg  
 115 120 125  
 Glu Leu Arg His Gln Leu Gly Pro Ser Leu Arg Ser Pro Pro Arg Val  
 130 135 140  
 Ile Ser Arg Pro Pro Pro Ser Val Ser Pro Pro Lys Cys Ile Gln Met  
 145 150 155 160  
 Glu Arg His Val Ile Arg Pro Pro Pro Ile Ser Pro Pro Pro Asp Ser  
 165 170 175  
 Leu Pro Leu Asp Asp Gly Ala Ala His Val Met His Arg Glu Val Trp  
 180 185 190  
 Met Ala Val Phe Ser Tyr Leu Ser His Gln Asp Leu Cys Val Cys Met  
 195 200 205  
 Arg Val Cys Arg Thr Trp Asn Arg Trp Cys Cys Asp Lys Arg Leu Trp  
 210 215 220  
 Thr Arg Ile Asp Leu Asn His Cys Lys Ser Ile Thr Pro Leu Met Leu  
 225 230 235 240  
 Ser Gly Ile Ile Arg Arg Gln Pro Val Ser Leu Asp Leu Ser Trp Thr  
 245 250 255  
 Asn Ile Ser Lys Lys Gln Leu Ser Trp Leu Ile Asn Arg Leu Pro Gly  
 260 265 270  
 Leu Arg Asp Leu Val Leu Ser Gly Cys Ser Trp Ile Ala Val Ser Ala  
 275 280 285  
 Leu Cys Ser Ser Ser Cys Pro Leu Leu Arg Thr Leu Asp Val Gln Trp

290	295	300													
Val	Glu	Gly	Leu	Lys	Asp	Ala	Gln	Met	Arg	Asp	Leu	Leu	Ser	Pro	Pro
305															320
Thr	Asp	Asn	Arg	Pro	Gly	Glu	Leu	Pro	Gly	Trp	Gly	Phe	Leu	Trp	Gly
															335
325															
Trp	Gly	Glu	Arg	Ala	Arg	Leu	Leu	Asp	Leu	Leu	Leu	Pro	Ser	Asp	Pro
															350
340															
Ser	Cys	Ser	Pro	Lys	Asp	Ile	Gly	Met	Ser	Leu	Cys	Cys	His	Val	Leu
															365
355															
Ser	Leu	Leu	Gln	Ala	Gln	Arg	Gly	Ser	Gly	Arg	Arg	Gln	Gly	Leu	Leu
															380
370															
Cys	Thr	Arg	Glu	Thr	Arg	Ser	Trp	Gly	Ser	Ala	Cys	Val	Ser	Leu	Leu
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385															
Ser	Cys														

<210> 5995  
<211> 1528  
<212> DNA  
<213> Homo sapiens

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180  
gcgtgcccata gcaggcagtt tgtacctttt gcgctggcc aagcacaggt gtttctctcg  
240  
tggtgggaca ttgaaatgga ccctgagggc aagatcaagt gcaccatggc ccccttctgg  
300  
gcacactcag acccagagga gatgcgttgg cgggaccact ggnatgcagt gtgtgtactt  
360  
cctgccacaa gaggagccgt tggtgcaggg ctcagcgctc tatctggtag cccaccacga  
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660  
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720  
aaaaatctt aaggctaacc acttggaaaga taaaattcac atcatagaga aacggccgga  
780  
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840  
cttcactacc agcctgctgc cgtggcgcaa cctctacttc tggtacgtgc ggaccgctgt  
900  
ggaccagcac ctggggccag gtgcctatggt gatgccccag gcagcctcgc tgcacgctgt  
960

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 1380  
 actgctgggt ggcccacgga ctgtcagcta tgcaGTTGGAG tttcacCCCG acacaggcga  
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 1528

<210> 5996  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 5996  
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 Val Ser Pro Ala Asp Phe Thr Val Leu Ser Asp Val Leu Pro Met Phe  
 35 40 45  
 Ser Val Asp Phe Ser Lys Gln Val Ser Ser Ala Ala Cys His Ser  
 50 55 60  
 Arg Gln Phe Val Pro Leu Ala Ser Gly Gln Ala Gln Val Val Leu Ser  
 65 70 75 80  
 Trp Trp Asp Ile Glu Met Asp Pro Glu Gly Lys Ile Lys Cys Thr Met  
 85 90 95  
 Ala Pro Phe Trp Ala His Ser Asp Pro Glu Glu Met Gln Trp Arg Asp  
 100 105 110  
 His Trp Xaa Ala Val Cys Val Leu Pro Ala Thr Arg Gly Ala Cys Gly  
 115 120 125  
 Ala Gly Leu Ser Ala Leu Ser Gly Ser Pro Pro Arg  
 130 135 140

<210> 5997  
 <211> 1759  
 <212> DNA  
 <213> Homo sapiens

<400> 5997  
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120  
cagttctaga tggaagaccc agatggact cctcccgcccc aggggttcca gcccccaccc  
180  
tctcagcccc tccccctgcca gctcaactct gcagtacacg atggggaaag gcttaaacgc  
240  
agctgccagg tgtaattttt caagtgtcaa agatcccaag tgatccctga cacccacccc  
300  
ttccctactct tacattcatg cgtctgttaag atagctgcct acaacaggtc agtagtgatg  
360  
ctcccgatcag aaaaacaaga tacaaaacaa acaacaaaca cacttggtcc ctteagacca  
420  
gtaagataca caaaccacct ccacgaccc tcgacccctccc cctccctccg gctgctctga  
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tctggatgtc acaccactgt taactgtcag taacaaaaat aataaggtagc atgctacaca  
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cacatccagc tggaagcctt gttggccctt aagcctttgtt ttcatgtcac agtactgagg  
660  
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720  
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780  
tcagctcctg cctctagttctt ccacccaaa agttcagtcg tctctgtctt ggagggact  
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1620  
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 1759

<210> 5998  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 5998  
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 Gly Ser Ala Gly Arg Trp Ala Pro Gly Trp Gly Arg Val Pro Ala Gly  
 20               25                   30  
 Pro Arg Cys Gly Ser Ser Cys Pro Ala Pro Arg Arg Arg Pro Ala Ala  
 35               40                   45  
 Pro Pro Ala Gly Arg Thr Ala Arg Cys Arg Pro Gly Ala Val Val Leu  
 50               55                   60  
 Cys Pro Pro Gly Leu Pro Thr Gly  
 65               70

<210> 5999  
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 <212> DNA  
 <213> Homo sapiens

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 240  
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 300  
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 360  
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 420  
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 aacacgcgtg acatgaccct catccatggc tactttggca gcacgcagg gctctctgat  
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 720  
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1320  
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1800  
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1860  
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1920  
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1980  
ggtgccgaga agatggtag ggaggcagag cagccgcgt tctgttccg gaagctggcg  
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2280  
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2340  
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 2640  
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 2700  
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 2759

&lt;210&gt; 6000

&lt;211&gt; 757

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6000  
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 Gln Arg Pro Asp Gln Leu Asp Lys Val Glu Gln Tyr Arg Arg Arg Glu  
 35 40 45  
 Ala Arg Lys Lys Ala Ser Val Glu Ala Arg Leu Lys Ala Ala Ile Gln  
 50 55 60  
 Ser Gln Leu Asp Gly Val Arg Thr Gly Leu Ser Gln Leu His Asn Ala  
 65 70 75 80  
 Leu Asn Asp Val Lys Asp Ile Gln Gln Ser Leu Ala Asp Val Ser Lys  
 85 90 95  
 Asp Trp Arg Gln Ser Ile Asn Thr Ile Glu Ser Leu Lys Asp Val Lys  
 100 105 110  
 Asp Ala Val Val Gln His Ser Gln Leu Ala Ala Val Glu Asn Leu  
 115 120 125  
 Lys Asn Ile Phe Ser Val Pro Glu Ile Val Arg Glu Thr Gln Asp Leu  
 130 135 140  
 Ile Glu Gln Gly Ala Leu Leu Gln Ala His Arg Lys Leu Met Asp Leu  
 145 150 155 160  
 Glu Cys Ser Arg Asp Gly Leu Met Tyr Glu Gln Tyr Arg Met Asp Ser  
 165 170 175  
 Gly Asn Thr Arg Asp Met Thr Leu Ile His Gly Tyr Phe Gly Ser Thr  
 180 185 190  
 Gln Gly Leu Ser Asp Glu Leu Ala Lys Gln Leu Trp Met Val Leu Gln  
 195 200 205  
 Arg Ser Leu Val Thr Val Arg Arg Asp Pro Thr Leu Leu Val Ser Val  
 210 215 220  
 Val Arg Ile Ile Glu Arg Glu Glu Lys Ile Asp Arg Arg Ile Leu Asp  
 225 230 235 240  
 Arg Lys Lys Gln Thr Gly Phe Val Pro Pro Gly Arg Pro Lys Asn Trp  
 245 250 255  
 Lys Glu Lys Met Phe Thr Ile Leu Glu Arg Thr Val Thr Arg Ile  
 260 265 270  
 Glu Gly Thr Gln Ala Asp Thr Arg Glu Ser Asp Lys Met Trp Leu Val

275	280	285
Arg His Leu Glu Ile Ile Arg Lys Tyr Val Leu Asp Asp Leu Ile Val		
290	295	300
Ala Lys Asn Leu Met Val Gln Cys Phe Pro Pro His Tyr Glu Ile Phe		
305	310	315
Lys Asn Leu Leu Asn Met Tyr His Gln Ala Leu Ser Thr Arg Met Gln		
325	330	335
Asp Leu Ala Ser Glu Asp Leu Glu Ala Asn Glu Ile Val Ser Leu Leu		
340	345	350
Thr Trp Val Leu Asn Thr Tyr Thr Ser Thr Glu Met Met Arg Asn Val		
355	360	365
Glu Leu Ala Pro Glu Val Asp Val Gly Thr Leu Glu Pro Leu Leu Ser		
370	375	380
Pro His Val Val Ser Glu Leu Leu Asp Thr Tyr Met Ser Thr Leu Thr		
385	390	395
Ser Asn Ile Ile Ala Trp Leu Arg Lys Ala Leu Glu Thr Asp Lys Lys		
405	410	415
Asp Trp Val Lys Glu Thr Glu Pro Glu Ala Asp Gln Asp Gly Tyr Tyr		
420	425	430
Gln Thr Thr Leu Pro Ala Ile Val Phe Gln Met Phe Glu Gln Asn Leu		
435	440	445
Gln Val Ala Ala Gln Ile Ser Glu Asp Leu Lys Thr Lys Val Leu Val		
450	455	460
Leu Cys Leu Gln Gln Met Asn Ser Phe Leu Ser Arg Tyr Lys Asp Glu		
465	470	475
Ala Gln Leu Tyr Lys Glu Glu His Leu Arg Asn Arg Gln His Pro His		
485	490	495
Cys Tyr Val Gln Tyr Met Ile Ala Ile Ile Asn Asn Cys Gln Thr Phe		
500	505	510
Lys Glu Ser Ile Val Ser Leu Lys Arg Lys Tyr Leu Lys Asn Glu Val		
515	520	525
Glu Glu Gly Val Ser Pro Ser Gln Pro Ser Met Asp Gly Ile Leu Asp		
530	535	540
Ala Ile Ala Lys Glu Gly Cys Ser Gly Leu Leu Glu Val Phe Leu		
545	550	555
Asp Leu Glu Gln His Leu Asn Glu Leu Met Thr Lys Lys Trp Leu Leu		
565	570	575
Gly Ser Asn Ala Val Asp Ile Ile Cys Val Thr Val Glu Asp Tyr Phe		
580	585	590
Asn Asp Phe Ala Lys Ile Lys Lys Pro Tyr Lys Arg Met Thr Ala		
595	600	605
Glu Ala His Arg Arg Val Val Val Glu Tyr Leu Arg Ala Val Met Gln		
610	615	620
Lys Arg Ile Ser Phe Arg Ser Pro Glu Glu Arg Lys Glu Gly Ala Glu		
625	630	635
Lys Met Val Arg Glu Ala Glu Gln Arg Arg Phe Leu Phe Arg Lys Leu		
645	650	655
Ala Ser Gly Phe Gly Glu Asp Val Asp Gly Tyr Cys Asp Thr Ile Val		
660	665	670
Ala Val Ala Glu Val Ile Lys Leu Thr Asp Pro Ser Leu Leu Tyr Leu		
675	680	685
Glu Val Ser Thr Leu Val Ser Lys Tyr Pro Asp Ile Arg Asp Asp His		
690	695	700
Ile Gly Ala Leu Leu Ala Val Arg Gly Asp Ala Ser Arg Asp Met Lys		

705	710	715	720
Gln Thr Ile Met Glu	Thr Leu Glu Gln Gly	Pro Ala Gln Ala Ser Pro	
725	730	735	
Ser Tyr Val Pro Leu Phe Lys Asp	Ile Val Val Pro Ser Leu Asn Val		
740	745	750	
Ala Lys Leu Leu Lys			
755			

<210> 6001  
<211> 2490  
<212> DNA  
<213> Homo sapiens

<400> 6001  
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120 gactgggagg cagagccgcc gc当地aggggg cctcggttaa acactggctg ttcaatcacc  
180 tgcaagacga aggaggcaag gatgctgttg gc当地gggtac aagcattctt cgtcagcaac  
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480 cggccttgcg aggacctgcg ctgtccagag accacccccc aggccctgcc agccttcacg  
540 acagaaatcc aggaagcgtc tgaaggggcca ggtgcagatg aggtgcaggt gttcgctct  
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660 cagcgggtgc ggatgaactc caaggagaaa aaggacctgg gaactctgg ctacgtgctg  
720 ggcatcattacca tgatggtgat catcattgcc atcggagctg gcatcatctt gggctactcc  
780 tacaagaggg ggaaggattt gaaagaacag catgatcaga aagtatgtga gagggagatg  
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960 ctatgggcc aggccggac tc当地ggggcc tgagcccccc cagtgccag gageccatgc  
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<210> 6002  
 <211> 263  
 <212> PRT  
 <213> Homo sapiens

<400> 6002  
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20	25	30
Tyr Arg Glu Asp Gln Thr Ser Pro Ala Pro Gly Leu Arg Cys Leu Asn		
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Trp Leu Asp Ala Gln Ser Gly Leu Ala Ser Ala Pro Val Ser Gly Ala		
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Gly Asn His Ser Tyr Cys Arg Asn Pro Asp Glu Asp Pro Ala Gly Pro		
65	70	75
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Trp Cys Tyr Val Ser Gly Glu Ala Gly Val Pro Glu Lys Arg Pro Cys		
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Glu Asp Leu Arg Cys Pro Glu Thr Thr Ser Gln Ala Leu Pro Ala Phe		
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Thr Thr Glu Ile Gln Glu Ala Ser Glu Gly Pro Gly Ala Asp Glu Val		
115	120	125
Gln Val Phe Ala Pro Ala Asn Ala Leu Pro Ala Arg Ser Glu Ala Ala		
130	135	140
Ala Val Gln Pro Val Ile Gly Ile Ser Gln Arg Val Arg Met Asn Ser		
145	150	155
160		
Lys Glu Lys Lys Asp Leu Gly Thr Leu Gly Tyr Val Leu Gly Ile Thr		
165	170	175
Met Met Val Ile Ile Ile Ala Ile Gly Ala Gly Ile Ile Leu Gly Tyr		
180	185	190
Ser Tyr Lys Arg Gly Lys Asp Leu Lys Glu Gln His Asp Gln Lys Val		
195	200	205
Cys Glu Arg Glu Met Gln Arg Ile Thr Leu Pro Leu Ser Ala Phe Thr		
210	215	220
Asn Pro Thr Cys Glu Ile Val Asp Glu Lys Thr Val Val Val His Thr		
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Gln Ala Gly Thr Pro Gly Ala		
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<210> 6003  
<211> 3107  
<212> DNA  
<213> Homo sapiens

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180  
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300  
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420  
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480

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600  
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660  
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1980  
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2100

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2280  
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<210> 6004  
<211> 140  
<212> PRT  
<213> Homo sapiens

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      20          25          30
Pro Ala Val Pro Lys Val Ala Pro Gly Thr Met Pro Thr Arg Pro Glu
      35          40          45
Gly Gly Thr Glu Thr Thr Ser Met Leu Xaa Val Pro Gly Val Thr Gln
      50          55          60
Ser Pro Arg Gly Glu Arg Gly Ser Gly Pro His Ala Val Gln Gly Val
      65          70          75          80
Ala Leu Pro Xaa Arg Gly Ser Pro Arg Gly Pro Gly Pro Arg Ala Pro
      85          90          95
Gly Arg Gly Arg Asp Cys Gly Gly Asn Gly Pro Ala Glu Ala Pro Ala

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100	105	110													
Pro	Leu	Ser	Ser	Ala	Phe	Gln	Pro	Pro	Ala	Leu	Gly	Pro	Ala	Pro	Lys
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<210> 6005  
<211> 1735  
<212> DNA  
<213> Homo sapiens

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180  
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240  
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 1680  
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 1735

&lt;210&gt; 6006

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6006  
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 Lys Gly Gln Lys Gly Asp Pro Gly Glu Pro Gly Pro Ala Gly Leu Lys  
 20 25 30  
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 35 40 45  
 Leu Lys Gly Glu Lys Gly Glu Ser Ala Ser Gln Pro Thr Gly Glu Pro  
 50 55 60  
 Gly Ser Ala His Ser Glu Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro  
 65 70 75 80  
 Gly Pro Met Gly Leu Gln Gly Ile Gln Gly Pro Lys Gly Leu Asp Gly  
 85 90 95  
 Ala Lys Gly Glu Lys Gly Ala Ser Gly Glu Arg Gly Ser Ser Gly Leu  
 100 105 110  
 Pro Gly Pro Val Gly Pro Pro Gly Leu Ile Gly Leu Pro Gly Thr Lys  
 115 120 125  
 Gly Glu Lys Gly Arg Pro Gly Glu Pro Gly Leu Asp Gly Phe Pro Gly  
 130 135 140  
 Pro Arg Gly Glu Lys Gly Asp Arg Ser Glu Arg Gly Glu Lys Gly Glu  
 145 150 155 160  
 Arg Gly Val Pro Gly Arg Lys Gly Val Lys Gly Gln Lys Gly Glu Pro  
 165 170 175  
 Gly Pro Pro Gly Leu Asp Gln Pro Cys Pro Val Gly Pro Asp Gly Leu  
 180 185 190  
 Pro Val Pro Gly Cys Trp His Lys  
 195 200

&lt;210&gt; 6007

&lt;211&gt; 693

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 6007  
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120  
ccttgcaacc agctctgttag aaccagcagc acaaacactg ttggggcaac agtgaacagc  
180  
caagccgcc aagctcagcc tcctgcccatt acgtccagca ggaagggcac attcacagat  
240  
gacttgcaca agttggtaga caattggcc cgagatgcca tgaatctctc aggccaggaga  
300  
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420  
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480  
ccagctaccc catttggcgc tcaatggagt gggacgggtg gcccagcacc acagccactt  
540  
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600  
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660  
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693

<210> 6008  
<211> 214  
<212> PRT  
<213> Homo sapiens

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Gly Lys Met Val Lys Lys Val Cys Pro Cys Asn Gln Leu Cys Arg Thr  
35 40 45  
Ser Ser Thr Asn Thr Val Gly Ala Thr Val Asn Ser Gln Ala Ala Gln  
50 55 60  
Ala Gln Pro Pro Ala Met Thr Ser Ser Arg Lys Gly Thr Phe Thr Asp  
65 70 75 80  
Asp Leu His Lys Leu Val Asp Asn Trp Ala Arg Asp Ala Met Asn Leu  
85 90 95  
Ser Gly Arg Arg Gly Ser Lys Gly His Met Asn Tyr Glu Gly Pro Gly  
100 105 110  
Met Ala Arg Lys Phe Ser Ala Pro Gly Gln Leu Cys Ile Ser Met Thr  
115 120 125  
Ser Asn Leu Gly Gly Ser Ala Pro Ile Ser Ala Ala Ser Ala Thr Ser  
130 135 140  
Leu Gly His Phe Thr Lys Ser Met Cys Pro Pro Gln Gln Tyr Gly Phe  
145 150 155 160  
Pro Ala Thr Pro Phe Gly Ala Gln Trp Ser Gly Thr Gly Gly Pro Ala

165	170	175
Pro Gln Pro Leu Gly Gln Phe Gln Pro Val Gly Thr Ala Ser Leu Gln		
180	185	190
Asn Phe Asn Ile Ser Asn Leu Gln Lys Ser Ile Ser Asn Pro Pro Gly		
195	200	205
Ser Asn Leu Arg Thr Thr		
210		

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<210> 6009  
<211> 1570  
<212> DNA  
<213> Homo sapiens
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<400> 6009  
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<210> 6010  
 <211> 468  
 <212> PRT  
 <213> Homo sapiens

<400> 6010  
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 35 40 45  
 Ala Met Ala Cys Ala Leu Gly Tyr Asp Ile His Phe His Asp Lys Lys  
 50 55 60  
 Ile Leu Leu Leu Glu Ala Gly Pro Lys Lys Val Leu Glu Lys Leu Ser  
 65 70 75 80  
 Glu Thr Tyr Ser Asn Arg Val Ser Ser Ile Ser Pro Gly Ser Ala Thr  
 85 90 95  
 Leu Leu Ser Ser Phe Gly Ala Trp Asp His Ile Cys Asn Met Arg Tyr  
 100 105 110  
 Arg Ala Phe Arg Arg Met Gln Val Trp Asp Ala Cys Ser Glu Ala Leu  
 115 120 125  
 Ile Met Phe Asp Lys Asp Asn Leu Asp Asp Met Gly Tyr Ile Val Glu  
 130 135 140  
 Asn Asp Val Ile Met His Ala Leu Thr Lys Gln Leu Glu Ala Val Ser  
 145 150 155 160  
 Asp Arg Val Thr Val Leu Tyr Arg Ser Lys Ala Ile Arg Tyr Thr Trp  
 165 170 175  
 Pro Cys Pro Phe Pro Met Ala Asp Ser Ser Pro Trp Val His Ile Thr  
 180 185 190  
 Leu Gly Asp Gly Ser Thr Phe Gln Thr Lys Leu Leu Ile Gly Ala Asp  
 195 200 205  
 Gly His Asn Ser Gly Val Arg Gln Ala Val Gly Ile Gln Asn Val Ser  
 210 215 220  
 Trp Asn Tyr Asp Gln Ser Ala Val Val Ala Thr Leu His Leu Ser Glu  
 225 230 235 240  
 Ala Thr Glu Asn Asn Val Ala Trp Gln Arg Phe Leu Pro Ser Gly Pro  
 245 250 255  
 Ile Ala Leu Leu Pro Leu Ser Asp Thr Leu Ser Ser Leu Val Trp Ser

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Thr Ser His Glu His Ala Ala Glu Leu Val Ser Met Asp	Glu Glu Lys	
275	280	285
Phe Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr		
290	295	300
Asp Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu		
305	310	315
Leu Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro		320
325	330	335
Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His		
340	345	350
Ala Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala		
355	360	365
His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly		
370	375	380
Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly		
385	390	395
Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg		400
405	410	415
Gln Arg His Asn Thr Ala Leu Leu Ala Ala Thr Asp Leu Leu Lys Arg		
420	425	430
Leu Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly		
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Leu Gln Ala Thr Asn Ala Val Ser Pro Leu Lys Glu Gln Ile Met Ala		
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Phe Ala Ser Lys		
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<211> 1331  
<212> DNA  
<213> Homo sapiens

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420  
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480  
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 <213> Homo sapiens

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 65 70 75 80  
 Arg Gly Lys Asn Gly Phe Thr Pro Leu His Met Ala Val Asp Lys Asp  
 85 90 95  
 Thr Thr Asn Val Gly Arg Tyr Pro Val Gly Arg Phe Pro Ser Leu His  
 100 105 110  
 Val Val Lys Val Leu Leu Asp Cys Gly Ala Asp Pro Asp Ser Arg Asp  
 115 120 125  
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 130 135 140  
 Ala Ile Met Asn Ala Leu Ile Glu Ala Gly Ala His Met Asp Ala Thr  
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 Asn Ala Phe Lys Lys Thr Ala Tyr Glu Leu Leu Asp Glu Lys Leu Leu

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210                    215

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<212> DNA  
<213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Thr Ser Glu Thr Tyr Leu Met Lys His Met Arg Lys His Asn Pro Pro  
 50 55 60  
 Asp Leu Gln Gln Gln Val Gln Ala Ala Ala Ala Ala Val Ala  
 65 70 75 80  
 Gln Ala  
 85 90 95  
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Pro Gly Ala Ala Pro Gln Gly Gly Gly Asp Ser Asn Pro Asn		
130	135	140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu		
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His His Lys Asp Ile Cys Leu Thr Val Thr Thr Ser Thr Ile Gln Val		
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Glu His Leu Ala Ser Ser		
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&lt;210&gt; 6015

&lt;211&gt; 612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6015

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&lt;210&gt; 6016

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6016

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<212> DNA  
<213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 Thr Ile Gln Met Lys Ser Thr Asp Ile Leu Tyr Arg Leu Gln Met Ser  
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 115 120 125  
 Thr Val Ala Ser Glu Cys Pro Ser Leu Arg Ile Lys Leu Leu Val Ser

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Leu	Asn	Phe
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		Leu
		Asn
		Glu
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Thr	His	His
Cys	Val	Glu
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		Ser
		Gln
		Glu
		Ala
		Ser
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Gly	Thr	Ser
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		Leu
		Pro
		Lys
		Met
		Ala
		Glu
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Gly		Gly
		Leu
		Lys
		Ala
		Lys
		Met
		Asp
		Ala
		Gly
		Trp
195	200	205
Thr	Gly	Leu
Gln	Ala	Ser
Asp	Ile	Met
Trp	Thr	Thr
		Ile
		Ser
		Asp
		Thr
		Gly
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		Ser
		Trp
		Thr
		Leu
		Gly
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		Leu
		Pro
		Lys
		Phe
		Asp
		Pro
		Leu
		Val
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		Tyr
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		Ser
		Tyr
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		Arg
		Glu
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		Thr
		Gly
		Leu
		Thr
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		Val
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		Lys
		Thr
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		Gly
		Thr
		Ala
		Ala
		Ser
		Cys
		Tyr
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		Lys
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		Asn
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		His
		Pro
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		Ser
		Pro
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Ala	Phe	Val
		Val
		Leu
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		Leu
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		Ile
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<212> DNA  
<213> Homo sapiens

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Pro Ile Lys Ile Ser Ser Thr Pro Pro Ser Gly Ser Arg Leu Asp Pro  
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<212> DNA  
<213> *Homo sapiens*

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<213> Homo sapiens

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Pro	Ala	Ala	Asn																																																																																																																																																																																																																																																		
640			Pro																																																																																																																																																																																																																																																		
Asn	Pro	Thr	Met																																																																																																																																																																																																																																																		
645	650	655	Ile																																																																																																																																																																																																																																																		
Arg	Ile	Arg	Leu																																																																																																																																																																																																																																																		
Asp	Ala	Phe	Val																																																																																																																																																																																																																																																		
655			Leu																																																																																																																																																																																																																																																		
Asp	Ala	Phe	Arg																																																																																																																																																																																																																																																		
660			Leu																																																																																																																																																																																																																																																		
Asn	Leu	Leu	Val																																																																																																																																																																																																																																																		
665			Lys																																																																																																																																																																																																																																																		
His	Leu	Ser	Gly																																																																																																																																																																																																																																																		
670			Ile																																																																																																																																																																																																																																																		

660	665	670
Ala Thr Asn Thr Val Thr Lys Ile Asn Leu Leu Asn Lys Val Leu Gly		
675	680	685
Ile Val Val Gly Val Leu Leu Gln Asp His Asp Val Arg Gln Ser Glu		
690	695	700
Phe Gln Gln Leu Pro Tyr His Arg Ile Phe Ile Met Leu Leu Leu Glu		
705	710	715
Leu Asn Ala Pro Glu His Val Leu Glu Thr Ile Asn Phe Gln Thr Leu		
725	730	735
Thr Ala Phe Cys Asn Thr Phe His Ile Leu Arg Pro Thr Lys Ala Pro		
740	745	750
Gly Phe Val Tyr Ala Trp Leu Glu Leu Ile Ser His Arg Ile Phe Ile		
755	760	765
Ala Arg Met Leu Ala His Thr Pro Gln Gln Lys Gly Trp Pro Met Tyr		
770	775	780
Ala Gln Leu Leu Ile Asp Leu Phe Lys Tyr Leu Ala Pro Phe Leu Arg		
785	790	795
Asn Val Glu Leu Thr Lys Pro Met Gln Ile Leu Tyr Lys Gly Thr Leu		
805	810	815
Arg Val Leu Leu Val Leu Leu His Asp Phe Pro Glu Phe Leu Cys Asp		
820	825	830
Tyr His Tyr Gly Phe Cys Asp Val Ile Pro Pro Asn Cys Ile Gln Leu		
835	840	845
Arg Asn Leu Ile Leu Ser Ala Phe Pro Arg Asn Met Arg Leu Pro Asp		
850	855	860
Pro Phe Thr Pro Asn Leu Lys Val Asp Met Leu Ser Glu Ile Asn Ile		
865	870	875
Ala Pro Arg Ile Leu Thr Asn Phe Thr Gly Val Met Pro Pro Gln Phe		
885	890	895
Lys Lys Asp Leu Asp Ser Tyr Leu Lys Thr Arg Ser Pro Val Thr Phe		
900	905	910
Leu Ser Asp Leu Arg Ser Asn Leu Gln Val Ser Asn Glu Pro Gly Asn		
915	920	925
Arg Tyr Asn Leu Gln Leu Ile Asn Ala Leu Val Leu Tyr Val Gly Thr		
930	935	940
Gln Ala Ile Ala His Ile His Asn Lys Gly Ser Thr Pro Ser Met Ser		
945	950	955
Thr Ile Thr His Ser Ala His Met Asp Ile Phe Gln Asn Leu Ala Val		
965	970	975
Asp Leu Asp Thr Glu Gly Arg Tyr Leu Phe Leu Asn Ala Ile Ala Asn		
980	985	990
Gln Leu Arg Tyr Pro Asn Ser His Thr His Tyr Phe Ser Cys Thr Met		
995	1000	1005
Leu Tyr Leu Phe Ala Glu Ala Asn Thr Glu Ala Ile Gln Glu Gln Ile		
1010	1015	1020
Thr Arg Val Leu Leu Glu Arg Leu Ile Val Asn Arg Pro His Pro Trp		
1025	1030	1035
Gly Leu Leu Ile Thr Phe Ile Glu Leu Ile Lys Asn Pro Ala Phe Lys		
1045	1050	1055
Phe Trp Asn His Glu Phe Val His Cys Ala Pro Glu Ile Glu Lys Leu		
1060	1065	1070
Phe Gln Ser Val Ala Gln Cys Cys Met Gly Gln Lys Gln Ala Gln Gln		
1075	1080	1085
Val Met Glu Gly Thr Gly Ala Ser		

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1095

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<211> 320  
<212> DNA  
<213> Homo sapiens

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60 taatctcttt gccatgtga atgtgccaa tgtatcaaag gtcattctt aaatggcatg  
120 gtggggcagt ggtgggcatt gtggctctgt gatctggcc aggctccag ccaccctggg  
180 gttccctgc tggctctg gaggacctgc ctcaaccctt ggatatgggg ttccacctga  
240 cagcaggaaa agagattta ggcctggagt ccaggcagga cagatggtag aaaccaatgg  
300 agatgcattgg ccctggcgcc  
320

<210> 6036  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 6036  
Met His Leu His Trp Phe Leu Pro Ser Val Leu Pro Gly Leu Gln Ala  
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Ser Asn Leu Phe Ser Cys Cys Gln Val Glu Pro His Ile Gln Gly Leu  
20 25 30  
Arg Gln Val Leu Gln Glu Pro Ser Arg Glu Pro Pro Gly Trp Leu Gly  
35 40 45  
Ala Trp Pro Arg Ser Gln Ser His Asn Ala His His Cys Pro Thr Met  
50 55 60  
Pro Phe Arg Met Glu Pro Leu Ile His Trp Ala His Ser His Gly Gln  
65 70 75 80  
Arg Asp Tyr Pro Trp Thr Met Ile Glu Thr Leu Pro Ile Pro Gln Thr  
85 90 95  
Gln Gln Gly Leu Cys Asp  
100

<210> 6037  
<211> 3910  
<212> DNA  
<213> Homo sapiens

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120  
gagctggggg tctccgacgt gttgggctat gtgcacccgg acctgctgaa agatttctgc  
180

atgaatcccc agacagtgtc gtcctgcgg gtcatcgccg ccttctgttt cctgggcatt  
240  
ctgtgttagtc tctccgcttt ccttctggat gtctttgggc cgaagcatcc tgctctgaag  
300  
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360  
ggcttttctt attgggcttc tgaactcatc ttggcccagc agcagcagca taagaagtac  
420  
catggatccc aggtctatgt caccttcgccc gttagttct acctgggtggc aggagctggt  
480  
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540  
gagcaggcgc tggagctgtc ctcagagatg gaagagaacg agccctaccc ggccgaaatat  
600  
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660  
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720  
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780  
gactctgcct ttagggtcat ccaagtatcc ctgctctcag aaccggaggt ccactggtt  
840  
tctataatgt actctttccc tcctgccaca tcctgcccccc ttcacattca cgagtattta  
900  
ccagccaggg aaggtcatcc aagtttccctc cagcatgggc gatatcttg ggaccgagac  
960  
tttccttggaa gagctgctga gagcggacag tccaaaaaac aagtgtcaaa gggcccaagg  
1020  
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1200  
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1320  
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1440  
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1500  
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1680  
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1740  
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1800

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1860  
tagactctga ctccggactc cagcttgcac cgtccctct ccccttttga atgtactctg  
1920  
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1980  
tctgggtctg gctgaattttt ctgccttgat atctggcat aaagtggatg aaacttggaaa  
2040  
gaccttcagt gtagatccag atggccaacc tgccttggta aagttacttg cttttttggaa  
2100  
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2160  
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2220  
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2340  
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2400  
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2460  
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2520  
ttgggtgtct gagcaggcag accagaagac caggcactgg acctgcattgc caaaggact  
2580  
ggtcataatcc tgaggaccc tacatgaccc tggactgt tccgcacatc ccggaaaccca  
2640  
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2700  
tgacactgat agtttgtcat ataaattcccc cgggttggat ttttttttttctt agaaaaaaaat  
2760  
taaaaaggaa aacaaaacca aaaaaaccag aaaccacgaa taagaatggaa aatgacaatg  
2820  
gtcgctgtt attttttgtt cacgattttc ctgatgggtt tggttccctt tgtctcagag  
2880  
aagcaggaga tggtgtatggat gctgtatttt tttttttttt tttttttttt gagacaagag  
2940  
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3000  
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3060  
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3120  
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3180  
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3240  
gaagggactt ggcattggcc agctccgtgc atggcattttt caccggcaga gcttcctaat  
3300  
cctgttttca cacaggaagt ttcttaggtct ttctagaaca gctagaaata gtagctgact  
3360  
cccgcccaag gcccaacccctt caaaccctgac gctttcagg ctgcatttc tggtgagcta  
3420

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 3540  
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 3660  
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 3720  
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 3780  
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 3900  
 aaaaaaaaaagg  
 3910

<210> 6038  
 <211> 214  
 <212> PRT  
 <213> Homo sapiens

<400> 6038  
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 Ile Thr Ala Leu Cys Thr Ala Leu Ala Glu Pro Ala Trp Leu His Ile  
 20               25                           30  
 His Gly Gly Thr Cys Ser Arg Gln Glu Leu Gly Val Ser Asp Val Leu  
 35               40                           45  
 Gly Tyr Val His Pro Asp Leu Leu Lys Asp Phe Cys Met Asn Pro Gln  
 50               55                           60  
 Thr Val Leu Leu Leu Arg Val Ile Ala Ala Phe Cys Phe Leu Gly Ile  
 65               70                           75                   80  
 Leu Cys Ser Leu Ser Ala Phe Leu Leu Asp Val Phe Gly Pro Lys His  
 85               90                           95  
 Pro Ala Leu Lys Ile Thr Arg Arg Tyr Ala Phe Ala His Ile Leu Thr  
 100              105                          110  
 Val Leu Gln Cys Ala Thr Val Ile Gly Phe Ser Tyr Trp Ala Ser Glu  
 115              120                          125  
 Leu Ile Leu Ala Gln Gln Gln His Lys Lys Tyr His Gly Ser Gln  
 130              135                          140  
 Val Tyr Val Thr Phe Ala Val Ser Phe Tyr Leu Val Ala Gly Ala Gly  
 145              150                          155                   160  
 Gly Ala Ser Ile Leu Ala Thr Ala Ala Asn Leu Leu Arg His Tyr Pro  
 165              170                          175  
 Thr Glu Glu Glu Glu Gln Ala Leu Glu Leu Leu Ser Glu Met Glu Glu  
 180              185                          190  
 Asn Glu Pro Tyr Pro Ala Glu Tyr Glu Val Ile Asn Gln Phe Gln Pro  
 195              200                          205  
 Pro Pro Ala Tyr Thr Pro  
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<210> 6039  
<211> 1130  
<212> DNA  
<213> Homo sapiens

<400> 6039  
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120  
ctgcgtgggg agccattgtg ggccagaat gtggtgcccg aggccgaagg ggaagacgat  
180  
ccggccgggtg aggccccaggc tggaggcta cccctgctgc cctgcgcggc tgcc tacgtg  
240  
agccccgggg cgcccttcta cggcctctg gtcgggagc tgccggcacg ccagctggag  
300  
ctggccgcgg agcacgcgtt gtcgtggac gtcgtggcc aggtgttctc ctggggccggg  
360  
ggcaggcatg gacagctggg ccatggacc ctggaggcag agctggagcc acggctgttg  
420  
gaggcgttgc agggcctagt catggctgag gtggccgcgg ggggctggca ttctgtgt  
480  
gtgagtgaga ctggggatat ttatatctgg ggctggaatg aatcaggcca gtcggccctg  
540  
cccacccagga acctggcaga ggatggagag actgtcgcaa gggaaagccac agaactgaat  
600  
gaagatgggtt ctcaggtgaa gagaacgggt ggggctgagg atggagcccc tgcccccttc  
660  
atagctgtcc agcccttccc ggcattactg gatctcccc tgggctcaga tgcagtcag  
720  
gccagctgtg gateccggca cacagctgtg gtgacacgaa cagggagct ctacacctgg  
780  
ggctgggtta aatatggaca gctggccac gaggacacca ccagcttggta tcggccctcg  
840  
cgtgtggaat actttgtaga taagcaactc caagtaaagg ctgtcacctg tggccgtgg  
900  
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960  
gcaacacactg tgagaccccc atttaggtca aggaaaaacca ttgcctgcac cccaaggggcc  
1020  
ccatatttgc`ccctccccat cacagtccctg cccttcaccc tcaagcacgg tcctaaactt  
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1130

<210> 6040  
<211> 312  
<212> PRT  
<213> Homo sapiens

<400> 6040  
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1 5 10 15  
Gly Leu Leu Ala Val Leu Arg Ala Gly Pro Gly Pro Glu Ala Leu Leu

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Gln Val Trp Ala Ala Glu Ser Ala Leu Arg Gly Glu Pro Leu Trp Ala		
35	40	45
Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu		
50	55	60
Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val		
65	70	75
Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala		
85	90	95
Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Asp Ala Ala		
100	105	110
Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His		
115	120	125
Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln		
130	135	140
Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys		
145	150	155
Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly		
165	170	175
Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val		
180	185	190
Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg		
195	200	205
Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln		
210	215	220
Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys		
225	230	235
Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu		
245	250	255
Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp		
260	265	270
Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys		
275	280	285
Gln Leu Gln Val Lys Ala Val Thr Cys Gly Pro Trp Asn Thr Tyr Val		
290	295	300
Tyr Ala Val Glu Lys Gly Lys Ser		
305	310	

<210> 6041  
<211> 291  
<212> DNA  
<213> Homo sapiens

<400> 6041  
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gaagaggaaa ggcttcgacg ggaggaagag gaaaggagac ggatagaaga agaaaggctt  
120  
cggttgagc agcaaaagca gcagataatg gcagcttaa actcccgacac tgccgtcag  
180  
ttcccagcgt atgcagccca acagtatcca gggactacg aacagcagca aattctcatc  
240  
cgcccagttgc aggagcaaca ctatcagcag tacatgcagc agttgtatca c  
291

<210> 6042  
<211> 97  
<212> PRT  
<213> Homo sapiens

<400> 6042  
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Arg Arg Arg Glu Glu Glu Glu Arg Leu Arg Arg Glu Glu Glu Arg  
20 25 30  
Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln  
35 40 45  
Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr  
50 55 60  
Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile  
65 70 75 80  
Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr Met Gln Gln Leu Tyr  
85 90 95  
His

<210> 6043  
<211> 558  
<212> DNA  
<213> Homo sapiens

<400> 6043  
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cacagggtgg agggagggggg ttgctccagg gaattctgaa tgtcccagt catgcagaag  
120  
ttcaagggtgt cttgtacaac ccactgggaa aacaggatct gggaccggtg cgggcacatt  
180  
ctcctggccc agcacagggg cggtgccacc cacattcggc cccgggtcttgc cctaatacat  
240  
gttttggtaa acactcggtc agagcacccct ctgttttttc cagttccgaa gctccccca  
300  
gaaatccaca ccccccgcacc accctctcg ggacacggat tcaatgtccc tggtgggtca  
360  
tctggccttt tcggcctgtg atgtgattcg agcggtgcta tcttttaacct cgggcagggg  
420  
tgttctcccc cgtcgacgtt gtcagataa cagtcctgca attccatggg ggtggcggca  
480  
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540  
agaggaggat gtgaattc  
558

<210> 6044  
<211> 152  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 6044

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 1 5 10 15  
 Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu  
 20 25 30  
 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp  
 35 40 45  
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val  
 50 55 60  
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser  
 65 70 75 80  
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met  
 85 90 95  
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg  
 100 105 110  
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe  
 115 120 125  
 Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser  
 130 135 140  
 Thr Leu Cys Leu Asp Ile Ser Tyr  
 145 150

&lt;210&gt; 6045

<211> 1916  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 6045

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 120  
 gtgttcacag acatcgacat cttcagagac ctgcaagaaa tatgcaggaa acagggagtt  
 180  
 gctgtgtata tccttctgga ccaggtctc ctctctcaat ttctggatat gtgcattggat  
 240  
 ctgaaaagttc atccctgaaca ggaaaagtta atgacagttc ggactatcac aggaaatatc  
 300  
 tactatgcaa ggtcaggaac taagattact gggaaaggttc acgaaaagtt cacgttgatt  
 360  
 gatggcatcc gcgtggcaac aggctctac agttttacat ggacggatgg caaattaaac  
 420  
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 480  
 atcctgtatg cccagtc当地 gccc当地 cccaaactcc tgtctcaactt ccagagc当地  
 540  
 aacaagttt当地 atcacctcac caaccgaaaa ccacagtc当地 aggagctcac cctgggcaac  
 600  
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 660  
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<210> 6046  
 <211> 457  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Arg Asp Leu Gln Glu Ile Cys Arg Lys Gln Gly Val Ala Val Tyr Ile  
 50 55 60  
 Leu Leu Asp Gln Ala Leu Leu Ser Gln Phe Leu Asp Met Cys Met Asp

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Leu Lys Val His Pro Glu Gln Glu Lys Leu Met Thr Val Arg Thr Ile			
85	90	95	
Thr Gly Asn Ile Tyr Tyr Ala Arg Ser Gly Thr Lys Ile Ile Gly Lys			
100	105	110	
Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile Arg Val Ala Thr Gly			
115	120	125	
Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu Asn Ser Ser Asn Leu			
130	135	140	
Val Ile Leu Ser Gly Gln Val Val Glu His Phe Asp Leu Glu Phe Arg			
145	150	155	160
Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro Lys Leu Leu Ser His			
165	170	175	
Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr Asn Arg Lys Pro Gln			
180	185	190	
Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg Met Arg Leu Ala Arg			
195	200	205	
Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp Pro Glu Met Pro Ala			
210	215	220	
Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys Glu Ser Ser Thr Val			
225	230	235	240
Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp Glu Leu Gln Ser Arg			
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Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro Gly Glu Glu Met Pro			
260	265	270	
Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr Ser Ile Thr Thr Ala			
275	280	285	
Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg Ile Ala Ser Ser Gln			
290	295	300	
Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln Thr Asp Met Asp Glu			
305	310	315	320
Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr Glu Gly Ser Pro Val			
325	330	335	
Ser Lys Met Ser Val Ser Arg Ser Ser Leu Lys Ser Ser Ser Ser			
340	345	350	
Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr Gly Ser Pro Ala Ser			
355	360	365	
Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr Pro Lys Tyr Leu Gly			
370	375	380	
Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser Leu Arg Asn Leu Asn			
385	390	395	400
Lys Glu Arg Gln Phe His Ala Gly Ile Arg Ser Arg Leu Asn His			
405	410	415	
Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe Thr Glu Asn His Leu			
420	425	430	
Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn Leu Leu Ala Val Arg			
435	440	445	
Asp Val Ala Leu Tyr Pro Ser Tyr Gln			
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&lt;211&gt; 773

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 180  
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu  
 50 55 60  
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu  
 65 70 75 80  
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala  
 85 90 95  
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 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg  
 115 120 125  
 Asp

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<210> 6049  
<211> 479  
<212> DNA  
<213> Homo sapiens

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120  
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180  
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360  
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35 40 45  
Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Thr  
50 55 60  
Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe  
65 70 75 80  
Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys  
85 90 95  
Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys  
100 105 110  
Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala  
115 120 125  
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<212> DNA  
<213> Homo sapiens

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gaacttcttgc acagccaca gtttatgaaa ttatttagatt cactccgaga gcaatatacc  
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<210> 6052  
 <211> 518  
 <212> PRT  
 <213> Homo sapiens

<400> 6052

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Thr	Gly	His	Glu	Leu	Leu	Ser	Glu	Leu	Gln	Gln	Arg	Arg	Phe	Asn	Gly
								35			40			45	
Ser	Asp	Gly	Gly	Val	Ser	Trp	Ser	Pro	Met	Asp	Asp	Glu	Leu	Leu	Ala
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Gln	Pro	Gln	Val	Met	Lys	Leu	Leu	Asp	Ser	Leu	Arg	Glu	Gln	Tyr	Thr
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Gln	Gln	Gln	Leu	Ser	Asp	Val	Cys	Tyr	Arg	Gln	Ala	Ser	Gln	Leu	Glu
			180				185							190	
Phe	Arg	Gln	Asn	Leu	Leu	Gln	Ala	Ala	Leu	Glu	Phe	His	Gly	Val	Ala
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Asp	Val	Ala	Pro	Ala	Asp	Gly	Ala	Ser	Ile	Gln	Gln	Thr	Leu	Lys	Leu
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His	Ile	Gln	Gly	Val	Met	Glu	Asp	Met	Gln	Leu	Arg	Lys	Gln	Arg	Cys
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Glu	Asp	Met	Val	Asp	Val	Arg	Arg	Leu	Lys	Met	Leu	Gln	Met	Val	Gln
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Leu	Phe	Lys	Cys	Glu	Glu	Asp	Ala	Ala	Lys	Ala	Val	Glu	Trp	Leu	Ser
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Glu	Leu	Leu	Asp	Ala	Leu	Leu	Lys	Thr	His	Ile	Arg	Leu	Gly	Asp	Asp
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Ala	Gln	Glu	Thr	Lys	Val	Leu	Leu	Glu	Lys	His	Arg	Lys	Phe	Val	Asp
	355				360				365						
Val	Ala	Gln	Ser	Thr	Tyr	Asp	Tyr	Gly	Arg	Gln	Leu	Leu	Gln	Ala	Thr
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Val	Val	Leu	Cys	Gln	Ser	Leu	Arg	Cys	Thr	Ser	Arg	Ser	Ser	Gly	Asp
	385				390				395				400		
Thr	Leu	Pro	Arg	Leu	Asn	Arg	Val	Trp	Lys	Gln	Phe	Thr	Ile	Ala	Ser
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Glu	Glu	Arg	Val	His	Arg	Leu	Glu	Met	Ala	Ile	Ala	Phe	His	Ser	Asn
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	435				440				445						
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Asp	Arg	Leu	Thr	Val	Pro	Val	Val	Tyr	Pro	Asp	Gly	Thr	Glu	Gln	Tyr
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	485				490				495						
Arg	Met	Lys	Leu	Val	Asn	Leu	Lys	Arg	Gln	Gln	Leu	Arg	His	Pro	Glu
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<212> DNA  
<213> Homo sapiens

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<210> 6054  
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 <212> PRT  
 <213> Homo sapiens

<400> 6054  
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 Gly Thr Cys Thr Leu Phe Phe Ala Phe Glu Cys Arg Tyr Leu Ala Val  
 65 70 75 80  
 Gln Leu Ser Pro Ala Ile Pro Val Phe Ala Ala Met Leu Phe Leu Phe  
 85 90 95  
 Ser Met Ala Thr Leu Leu Arg Thr Ser Phe Ser Asp Pro Gly Val Ile  
 100 105 110  
 Pro Arg Ala Leu Pro Asp Glu Ala Ala Phe Ile Glu Met Glu Ile Glu  
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 Ala Thr Asn Gly Ala Val Pro Gln Gly Gln Arg Pro Pro Pro Arg Ile  
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 Thr Cys Lys Ile Phe Arg Pro Pro Arg Ala Ser His Cys Ser Ile Cys  
 165 170 175  
 Asp Asn Cys Val Glu Arg Phe Asp His His Cys Pro Trp Val Gly Asn  
 180 185 190  
 Cys Val Gly Lys Arg Asn Tyr Arg Tyr Phe Tyr Leu Phe Ile Leu Ser  
 195 200 205  
 Leu Ser Leu Leu Thr Ile Tyr Val Phe Ala Phe Asn Ile Val Tyr Val  
 210 215 220  
 Ala Leu Lys Ser Leu Lys Ile Gly Phe Leu Glu Thr Leu Lys Glu Thr  
 225 230 235 240  
 Pro Gly Thr Val Leu Glu Val Leu Ile Cys Phe Phe Thr Leu Trp Ser  
 245 250 255  
 Val Val Gly Leu Thr Gly Phe His Thr Phe Leu Val Ala Leu Asn Gln  
 260 265 270  
 Thr Thr Asn Glu Asp Ile Lys Gly Ser Trp Thr Gly Lys Asn Arg Val  
 275 280 285  
 Gln Asn Pro Tyr Ser His Gly Asn Ile Val Lys Asn Cys Cys Glu Val  
 290 295 300  
 Leu Cys Gly Pro Leu Pro Pro Ser Val Leu Asp Arg Arg Gly Ile Leu  
 305 310 315 320  
 Pro Leu Glu Glu Ser Gly Ser Arg Pro Pro Ser Thr Gln Glu Thr Ser  
 325 330 335  
 Ser Ser Leu Leu Pro Gln Ser Pro Ala Pro Thr Glu His Leu Asn Ser

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Glu Pro Pro Glu Pro Pro Gln Glu Ala Ala Glu Ala Glu Lys		
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<212> DNA  
<213> Homo sapiens

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180  
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480  
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 1980  
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<210> 6056  
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 <212> PRT  
 <213> Homo sapiens

<400> 6056  
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 35 40 45  
 Leu Ala Val Ser Arg Thr Asp Gly Thr Val Glu Ile Tyr Asn Leu Ser  
 50 55 60  
 Ala Asn Tyr Phe Gln Glu Lys Phe Phe Pro Gly His Glu Ser Arg Ala  
 65 70 75 80  
 Thr Glu Ala Leu Cys Trp Ala Glu Gly Gln Arg Leu Phe Ser Ala Gly  
 85 90 95  
 Leu Asn Gly Glu Ile Met Glu Tyr Asp Leu Gln Ala Leu Asn Ile Lys  
 100 105 110  
 Tyr Ala Met Asp Ala Phe Gly Gly Pro Ile Trp Ser Met Ala Ala Ser  
 115 120 125  
 Pro Ser Gly Ser Gln Leu Leu Val Gly Cys Glu Asp Gly Ser Val Lys  
 130 135 140  
 Leu Phe Gln Ile Thr Pro Asp Lys Ile Gln Phe Glu Arg Asn Phe Asp

145	150	155	160
Arg Gln Lys Ser Arg Ile Leu Ser Leu Ser Trp His Pro Ser Gly Thr			
165	170	175	
His Ile Ala Ala Gly Ser Ile Asp Tyr Ile Ser Val Phe Asp Val Lys			
180	185	190	
Ser Gly Ser Ala Val His Lys Met Ile Val Asp Arg Gln Tyr Met Gly			
195	200	205	
Val Ser Lys Arg Lys Cys Ile Val Trp Gly Val Ala Phe Leu Ser Asp			
210	215	220	
Gly Thr Ile Ile Ser Val Asp Ser Ala Gly Lys Val Gln Phe Trp Asp			
225	230	235	240
Ser Ala Thr Gly Thr Leu Val Lys Ser His Leu Ile Ala Asn Ala Asp			
245	250	255	
Val Gln Ser Ile Ala Val Ala Asp Gln Glu Asp Ser Phe Val Val Gly			
260	265	270	
Thr Ala Arg Glu Gln Ser Ser Ile Phe Ser Trp Ser Leu			
275	280	285	

&lt;210&gt; 6057

&lt;211&gt; 3924

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6057

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<210> 6058  
<211> 500  
<212> PRT  
<213> Homo sapiens

<400> 6058  
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 Phe Glu Lys His Ser Glu Asn Phe Ala Trp Thr Glu Asn Arg Tyr Asp  
 35 40 45  
 Val Asn Arg Arg Arg His Asn Ser Ser Asp Gly Phe Asp Ser Ala Ile  
 50 55 60  
 Gly Arg Pro Asn Gly Gly Asn Phe Gly Arg Lys Glu Lys Asn Gly Trp  
 65 70 75 80  
 Arg Thr His Gly Arg Asn Gly Thr Glu Asn Ile Asn His Arg Gly Gly  
 85 90 95  
 Tyr His Gly Gly Ser Ser Arg Ser Arg Ser Ser Ile Phe His Ala Gly  
 100 105 110  
 Lys Ser Gln Gly Leu His Glu Asn Asn Ile Pro Asp Asn Glu Thr Gly  
 115 120 125  
 Arg Lys Glu Asp Lys Arg Glu Arg Lys Gln Phe Glu Ala Glu Asp Phe  
 130 135 140  
 Pro Ser Leu Asn Pro Glu Tyr Glu Arg Glu Pro Asn His Asn Lys Ser  
 145 150 155 160  
 Leu Ala Ala Gly Val Trp Gly Leu His Ala Gln Thr His Thr Tyr Pro  
 165 170 175  
 Thr Lys Lys Ile Ser Gln Ala Pro Leu Leu Glu Tyr Pro Pro Asn Pro  
 180 185 190  
 Lys Ser Arg Ala Pro Arg Met Leu Val Ile Lys Lys Gly Asn Thr Lys  
 195 200 205  
 Asp Leu Gln Leu Ser Gly Phe Pro Val Val Gly Asn Leu Pro Ser Gln  
 210 215 220  
 Pro Val Lys Asn Gly Thr Gly Pro Ser Val Tyr Lys Gly Leu Val Pro  
 225 230 235 240  
 Lys Pro Ala Ala Pro Pro Thr Lys Pro Thr Gln Trp Lys Ser Gln Thr  
 245 250 255  
 Lys Glu Asn Lys Val Gly Thr Ser Phe Pro His Glu Ser Thr Phe Gly  
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 Ser Thr Asn Ser Val Lys Glu Cys Asn Arg Ser Asn Ser Ser Ser Pro  
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 Val Asp Lys Leu Asn Gln Gln Pro Arg Leu Thr Lys Leu Thr Arg Met  
 305 310 315 320  
 Arg Thr Asp Lys Lys Ser Glu Phe Leu Lys Ala Leu Lys Arg Asp Arg  
 325 330 335  
 Val Glu Glu Glu His Glu Asp Glu Ser Arg Ala Gly Ser Glu Lys Asp  
 340 345 350  
 Asp Asp Ser Phe Asn Leu His Asn Ser Asn Ser Thr His Gln Glu Arg  
 355 360 365  
 Asp Ile Asn Arg Asn Phe Asp Glu Asn Glu Ile Pro Gln Glu Asn Gly  
 370 375 380  
 Asn Ala Ser Val Ile Ser Gln Gln Ile Ile Arg Ser Ser Thr Phe Pro  
 385 390 395 400  
 Gln Thr Asp Val Leu Ser Ser Ser Leu Glu Ala Glu His Arg Leu Leu  
 405 410 415  
 Lys Glu Met Gly Trp Gln Glu Asp Ser Glu Asn Asp Glu Thr Cys Ala

420	425	430
Pro Leu Thr Glu Asp Glu Met Arg Glu Phe Gln Val Ile Ser Glu Gln		
435	440	445
Leu Gln Lys Asn Gly Leu Arg Lys Asn Gly Ile Leu Lys Asn Gly Leu		
450	455	460
Ile Cys Asp Phe Lys Phe Gly Pro Trp Lys Asn Ser Thr Phe Lys Pro		
465	470	475
Thr Thr Glu Asn Asp Asp Thr Glu Thr Ser Ser Ser Asp Thr Ser Asp		
485	490	495
Asp Asp Asp Val		
500		

&lt;210&gt; 6059

&lt;211&gt; 1442

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6059

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 GC  
 1442

<210> 6060  
 <211> 313  
 <212> PRT  
 <213> Homo sapiens

<400> 6060  
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 Ile Ser Tyr Thr Ile Thr Ile Phe Gly Asn Val Ser Ile Met Met Val  
 35 40 45  
 Cys Ile Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr  
 50 55 60  
 Asn Leu Ser Ile Leu Asp Leu Cys Tyr Thr Thr Thr Val Pro His  
 65 70 75 80  
 Met Leu Val Asn Ile Gly Cys Asn Lys Lys Thr Ile Ser Tyr Ala Gly  
 85 90 95  
 Cys Val Ala His Leu Ile Ile Phe Leu Ala Leu Gly Ala Thr Glu Cys  
 100 105 110  
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 115 120 125  
 Pro Leu His Tyr Val Val Ile Met Asn Tyr Trp Phe Cys Leu Arg Met  
 130 135 140  
 Ala Ala Phe Ser Trp Leu Ile Gly Phe Gly Asn Ser Val Leu Gln Ser  
 145 150 155 160  
 Ser Leu Thr Leu Asn Met Pro Arg Cys Gly His Gln Glu Val Asp His  
 165 170 175  
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 180 185 190  
 Lys Pro Ile Glu Ala Glu Leu Phe Phe Ser Val Leu Ile Leu Leu  
 195 200 205  
 Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Gly Phe Ile Ala Gln Ala  
 210 215 220  
 Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr  
 225 230 235 240  
 Cys Gly Ser His Met Ile Val Val Ser Leu Phe Tyr Gly Thr Ala Ile  
 245 250 255  
 Tyr Met Tyr Leu Gln Pro Pro Ser Ser Thr Ser Lys Asp Trp Gly Lys

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Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala Phe Lys Arg Leu		
290	295	300
Met Pro Arg Ile Phe Phe Cys Lys Lys		
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&lt;210&gt; 6061

&lt;211&gt; 1582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6061

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<210> 6062  
<211> 226  
<212> PRT  
<213> Homo sapiens

<400> 6062  
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 Arg Pro Arg Asp Leu Leu Gln Arg Tyr Asp Ser Lys Pro Ile Val Asp  
 35 40 45  
 Leu Ile Gly Ala Met Glu Thr Gln Ser Glu Pro Ser Glu Leu Glu Leu  
 50 55 60  
 Asp Asp Val Val Ile Thr Asn Pro His Ile Glu Ala Ile Leu Glu Asn  
 65 70 75 80  
 Glu Asp Trp Ile Glu Asp Ala Ser Gly Leu Met Ser His Cys Ile Ala  
 85 90 95  
 Ile Leu Lys Ile Cys His Thr Leu Thr Glu Lys Leu Val Ala Met Thr  
 100 105 110  
 Met Gly Ser Gly Ala Lys Met Lys Thr Ser Ala Ser Val Ser Asp Ile  
 115 120 125  
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 130 135 140  
 Ser Met Tyr Pro Pro Leu Asp Pro Lys Leu Leu Asp Ala Arg Thr Thr  
 145 150 155 160  
 Ala Leu Leu Leu Ser Val Ser His Leu Val Leu Val Thr Arg Asn Ala  
 165 170 175  
 Cys His Leu Thr Gly Gly Leu Asp Trp Ile Asp Gln Ser Leu Ser Ala  
 180 185 190  
 Ala Glu Glu His Leu Glu Val Leu Arg Glu Ala Ala Leu Ala Ser Glu  
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 Ala Ile  
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<210> 6063  
<211> 2286

<212> DNA  
<213> Homo sapiens

<400> 6063

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<210> 6064  
 <211> 233  
 <212> PRT  
 <213> Homo sapiens

<400> 6064  
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 35 40 45  
 Asp Ala Ala Leu Ala Leu Gln Ala Arg Gly Cys Ser Val Lys Ile Trp  
 50 55 60  
 Thr Ala His Tyr Asp Pro Gly His Cys Phe Ala Glu Ser Arg Glu Leu  
 65 70 75 80  
 Pro Val Arg Cys Ala Gly Asp Trp Leu Pro Arg Gly Leu Gly Trp Gly  
 85 90 95  
 Gly Arg Gly Ala Ala Val Cys Ala Tyr Val Arg Met Val Phe Leu Ala  
 100 105 110  
 Leu Tyr Val Leu Phe Leu Ala Asp Glu Glu Phe Asp Val Val Val Cys  
 115 120 125  
 Asp Gln Val Ser Ala Cys Ile Pro Val Phe Arg Leu Ala Arg Arg Arg  
 130 135 140  
 Lys Lys Ile Leu Phe Tyr Cys His Phe Pro Asp Leu Leu Leu Thr Lys

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Glu	Glu	Tyr	Thr	Thr	Gly	Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln
			180		185					190					
Phe	Thr	Ala	Ala	Val	Phe	Lys	Glu	Thr	Phe	Lys	Ser	Leu	Ser	His	Ile
			195		200					205					
Asp	Pro	Asp	Val	Leu	Tyr	Pro	Ser	Leu	Asn	Val	Thr	Ser	Phe	Asp	Ser
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Val	Val	Pro	Glu	Xaa	Ser	Trp	Met	Thr							
			225		230										

&lt;210&gt; 6065

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6065

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 1980  
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 2084

&lt;210&gt; 6066

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6066  
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 Ala Ile Asp Lys Pro Thr Tyr Ala Thr Lys Trp Pro Ile Arg His Gly  
 35 40 45  
 Ile Ile Glu Asp Trp Asp Leu Met Glu Arg Phe Met Glu Gln Val Val  
 50 55 60  
 Phe Lys Tyr Leu Arg Ala Glu Pro Glu Asp His Tyr Phe Leu Met Gly  
 65 70 75 80

&lt;210&gt; 6067

&lt;211&gt; 406

<212> DNA  
<213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

<400> 6068  
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35 40 45  
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro  
50 55 60  
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys  
65 70 75 80  
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys  
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Arg Gly Ala Val Ser Ser Gly Arg Leu His Arg Arg Gly Thr Gly Ala  
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Met Trp Trp Glu Gly  
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<210> 6069  
<211> 456  
<212> DNA  
<213> Homo sapiens

<400> 6069  
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 456

<210> 6070  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 6070  
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 20               25               30  
 His Arg Tyr His Arg Lys Glu Asn Leu Glu Tyr Cys Ile Met Val Ile  
 35               40               45  
 Gly Val Pro Asn Val Gly Lys Ser Ser Leu Ile Asn Ser Leu Arg Arg  
 50               55               60  
 Gln His Leu Arg Lys Gly Lys Ala Thr Arg Val Gly Gly Glu Pro Gly  
 65               70               75               80  
 Ile Thr Arg Ala Val Met Ser Lys Ile Gln Val Glu Ser Ser Gly Ala  
 85               90               95  
 Arg Pro Ser Thr Leu Ser Arg Ala Leu Gln Ala Ser Gly Thr Cys Arg  
 100              105              110  
 Pro Leu Cys Gly Phe Arg Leu Leu Thr Thr Leu Pro Ser Pro Pro Leu  
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 Ser Val Pro Ala Glu His Pro Arg Gly Arg His Cys Pro Ala Leu Ile  
 130              135              140  
 Pro Gln Ser Ser  
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<210> 6071  
 <211> 2633  
 <212> DNA  
 <213> Homo sapiens

<400> 6071  
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 2580  
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 2633

&lt;210&gt; 6072

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6072  
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 Ala Glu Ala Gly Gly Ser Phe Glu Val Arg Ser Ser Arg Pro Ala Trp  
 20 25 30  
 Pro Thr Trp Arg Asn Pro Ile Ser Thr Lys Asn Thr Lys Ile Asn Lys  
 35 40 45  
 Ala Trp Trp Arg Val Pro Val Val Pro Ala Thr Arg Glu Ala Glu Ala  
 50 55 60  
 Gly Glu Ser Leu Glu Pro Gly Arg Arg Arg Phe Gln  
 65 70 75

&lt;210&gt; 6073

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 35 40 45  
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 Cys Lys Ala Ile Glu Arg Gly Thr Gly Asn Asp Asn Tyr Arg Thr Thr  
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 Gly Ile Ala Thr Ile Glu Val Phe Leu Pro Pro Arg Leu Lys Lys Asp  
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<212> DNA  
<213> Homo sapiens

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 Glu Gly Ser Gly Asp Glu Asp Ser Glu Gly Leu Gly Leu Glu Glu Tyr  
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 Asp Glu Asp Asp Leu Gly Ala Ala Glu Gln Glu Cys Gly Asp Gln

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<212> PRT  
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35 40 45  
Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala  
50 55 60  
Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg  
65 70 75 80  
Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val  
85 90 95  
Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

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Gly Lys		160

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<212> PRT  
<213> Homo sapiens

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35 40 45  
Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys Leu Thr  
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Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser Ser His

	70		75		80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu					
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Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu					
100		105			110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met					
115		120			125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn					
130		135			140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu					
145		150			160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe					
165		170			175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln					
180		185			190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn					
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<212> PRT  
<213> *Homo sapiens*

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Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
    35          40          45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
    50          55          60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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 <212> PRT  
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 35 40 45  
 Val Cys Val Cys Val Ser Val Cys Val Cys Val Cys Val His Thr Gly  
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<212> DNA  
<213> Homo sapiens  
  
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<213> Homo sapiens

<400> 6088

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							20		25				30		
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						35		40				45			
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Lys	Gly	
						50		55				60			
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Phe	Asp	Ile	Tyr	Thr	Ile	Ala	Phe	Gly	Ile	Arg	Asn	Val	Thr	His	Ile
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Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly
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<211> 4211  
<212> DNA  
<213> Homo sapiens

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5269

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3000

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Pro	Glu	Leu	His	Thr	Lys	Glu	Gln	Ile	Leu	Glu	Leu	Leu	Val	Leu	Glu
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Gln	Phe	Leu	Thr	Ile	Leu	Pro	Glu	Glu	Phe	Gln	Pro	Trp	Val	Arg	Glu
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Ser	Val	Pro	Gln	Asp	Pro	Asp	Phe	Ala	Glu	Val	Ser	Asp	Leu	Lys	Gly
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Lys	Phe	Phe	Leu	Gln	Ala	Ser	Asn	Phe	Ile	Gln	His	Arg	Arg	Ile	His
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Thr	Gly	Glu	Lys	Pro	Phe	Lys	Cys	Gly	Glu	Cys	Gly	Lys	Ser	Tyr	Asn
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Gln	Arg	Val	His	Leu	Thr	Gln	His	Gln	Arg	Val	His	Thr	Gly	Glu	Lys
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Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys			
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Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr			
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Gly Glu Arg Pro His Lys Cys Asn Glu Cys Gly Lys Ser Phe Ile Gln			
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Phe Arg Cys Glu Glu Cys Gly Lys Ser Tyr Asn Gln Arg Val His Leu			
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Thr Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Thr Cys Pro			
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Gly Phe Gly Arg Arg Ser His Leu Ala Gly His Leu Arg Leu His Ser			
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Arg Glu Lys Ser His Gln Cys Arg Glu Cys Gly Glu Ile Phe Phe Gln			
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Tyr Val Ser Leu Ile Glu His Gln Val Leu His Met Gly Gln Lys Asn			
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Ile Cys Gly Lys Ala Phe Gly Tyr Ser Ser Asp Leu Ile Gln His Tyr			
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Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu			
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Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser			
755	760	765	
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Pro	Ala	Ser	Gln
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Tyr	Trp	Val	Leu
Gly	His	Pro	Asn
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Val	Pro	Ser	Pro
Pro	Pro	Ser	Gly
Phe	Arg	Leu	Pro
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Pro	Pro	Arg	Asp
Leu	Gly	Thr	Ser
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Ala	Ala	Ser	His
Lys	Pro	Ser	Asn
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Gly	Gln	Leu	Gln
Leu	Leu	His	Leu
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6093

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	85	90	95													
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&lt;211&gt; 441

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6095

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&lt;210&gt; 6096

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys
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Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
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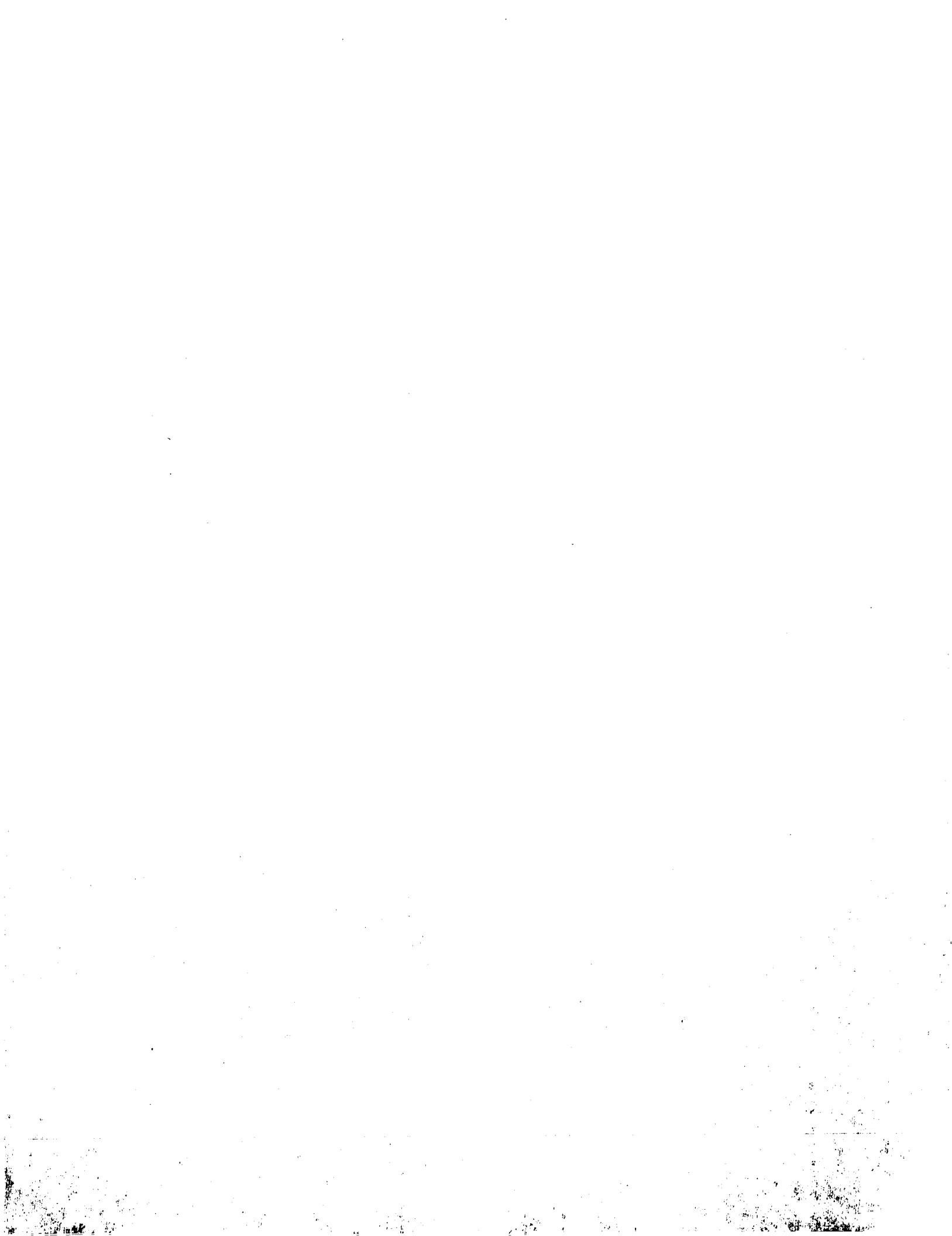
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465	470	475	480																																																																																																																																																																																																																																																																																																														
Leu	Leu	Asn	Gly																																																																																																																																																																																																																																																																																																														
Met	Gly	Pro	Leu																																																																																																																																																																																																																																																																																																														
Gly	Arg	Arg	Ala																																																																																																																																																																																																																																																																																																														
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Ala	Gly	Gly																																																																																																																																																																																																																																																																																																															
485	490	495																																																																																																																																																																																																																																																																																																															
Ala	Asn	Ile	Gln																																																																																																																																																																																																																																																																																																														
Ile	His	Ala	Gln																																																																																																																																																																																																																																																																																																														
Gln	Leu	Leu	Lys																																																																																																																																																																																																																																																																																																														
Leu	Arg	Pro	Arg																																																																																																																																																																																																																																																																																																														
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Pro	Ser	Pro	Leu																																																																																																																																																																																																																																																																																																														
Leu	Val	Thr	Met																																																																																																																																																																																																																																																																																																														
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930	935	940
Arg Gln Gln Gln Gln Gln Gln Gln Glu Tyr Gln Glu Leu		
945	950	955
Phe Arg His Met Asn Gln Gly Asp Ala Gly Ser Leu Ala Pro Ser Leu		
965	970	975
Gly Gly Gln Ser Met Thr Glu Arg Gln Ala Leu Ser Tyr Gln Asn Ala		
980	985	990
Asp Ser Tyr His His Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln		
995	1000	1005
Leu Asp Asn Leu Pro Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser		
1010	1015	1020
Ser Ala Arg Met Ser Asp Ala Val Leu Ser Gln Ser Ser Leu Met Gly		
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Ser Gln Gln Phe Gln Asp Gly Glu Asn Glu Glu Cys Gly Ala Ser Leu		
1045	1050	1055
Gly Gly His Glu His Pro Asp Leu Ser Asp Gly Ser Gln His Leu Asn		
1060	1065	1070
Ser Ser Cys Tyr Pro Ser Thr Cys Ile Thr Asp Ile Leu Leu Ser Tyr		
1075	1080	1085
Lys His Pro Glu Val Ser Phe Ser Met Glu Gln Ala Gly Val		
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&lt;210&gt; 6101

&lt;211&gt; 1447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 6101  
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<210> 6102  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 6102  
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 35 40 45  
 Ile His Leu Gly Pro Arg Gln Ala Val Arg Pro Ser Val Arg Ala Glu  
 50 55 60  
 Ser Arg Arg Val Asp Gly Gly Arg Ser Pro Arg Glu Pro Asp Gly  
 65 70 75 80  
 Arg Gly Arg Ser Arg Gln Ala Arg Phe Ser Pro Tyr Pro Ile Pro Ala  
 85 90 95  
 Val Glu Pro Asp Leu Leu Arg Ser Val Leu Gln Gln Arg Leu Ile Ala  
 100 105 110  
 Leu Gly Gly Val Ile Ala Ala Arg Ile Ser Val  
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<210> 6103  
 <211> 309

<212> DNA  
<213> Homo sapiens

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120  
agaacacctatg cctttagatgaa gaagattggg cagtccccag tgagagtctt gaaggagatt  
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<210> 6104  
<211> 71  
<212> PRT  
<213> Homo sapiens

<400> 6104  
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Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp  
50 55 60  
Gly Leu Gly Met Arg Tyr Ala  
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<210> 6105  
<211> 1846  
<212> DNA  
<213> Homo sapiens

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<210> 6106  
<211> 405  
<212> PRT  
<213> Homo sapiens

<400> 6106

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															25
Asn	Ser	Thr	Gln	Pro	Ser	Thr	Ala	Gly	Met	Lys	Trp	Cys	Leu	Pro	Phe
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															40
His	Leu	Leu	Cys	Arg	Gly	Pro	Ser	Gly	Ser	Leu	Ser	Ala	Pro	Pro	Ala
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															55
Ala	Ser	Val	Ile	Ser	Ala	Pro	Pro	Ser	Ser	Ser	Arg	His	Arg	Lys	
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															70
Arg	Arg	Arg	Thr	Ser	Ser	Lys	Ser	Glu	Ala	Gly	Ala	Arg	Gly	Gly	
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Gln	Gly	Ser	Lys	Glu	Lys	Gly	Arg	Gly	Ser	Trp	Gly	Gly	Arg	His	His
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															105
His	His	His	Pro	Leu	Pro	Ala	Ala	Gly	Phe	Lys	Lys	Gln	Gln	Arg	Lys
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															120
Phe	Gln	Tyr	Gly	Asn	Tyr	Cys	Lys	Tyr	Tyr	Gly	Arg	Asn	Pro	Ser	
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															135
Cys	Glu	Asp	Gly	Arg	Leu	Arg	Val	Leu	Lys	Pro	Glu	Trp	Phe	Gly	
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															150
Arg	Asp	Val	Leu	Asp	Leu	Gly	Cys	Asn	Val	Gly	His	Leu	Thr	Leu	Ser
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															170
Ile	Ala	Cys	Lys	Trp	Gly	Pro	Ser	Arg	Met	Val	Gly	Leu	Asp	Ile	Asp
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															185
Ser	Arg	Leu	Ile	His	Ser	Ala	Arg	Gln	Asn	Ile	Arg	His	Tyr	Leu	Ser
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															200
Glu	Glu	Leu	Arg	Leu	Pro	Pro	Gln	Thr	Leu	Glu	Gly	Asp	Pro	Gly	Ala
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Glu	Gly	Glu	Gly	Thr	Thr	Thr	Val	Arg	Lys	Arg	Ser	Cys	Phe	Pro	
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Ala	Ser	Leu	Thr	Ala	Ser	Arg	Gly	Pro	Ile	Ala	Ala	Pro	Gln	Val	Pro
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Leu	Asp	Gly	Ala	Asp	Thr	Ser	Val	Phe	Pro	Asn	Asn	Val	Val	Phe	Val
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Thr	Gly	Asn	Tyr	Val	Leu	Asp	Arg	Asp	Asp	Leu	Val	Glu	Ala	Gln	Thr
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Pro	Glu	Tyr	Asp	Val	Val	Leu	Cys	Leu	Ser	Leu	Thr	Lys	Trp	Val	His
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Leu	Asn	Trp	Gly	Asp	Glu	Gly	Leu	Lys	Arg	Met	Phe	Arg	Arg	Ile	Tyr
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Arg	His	Leu	Arg	Pro	Gly	Gly	Ile	Leu	Val	Leu	Glu	Pro	Gln	Pro	Trp
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Ser	Ser	Tyr	Gly	Lys	Arg	Lys	Thr	Leu	Thr	Glu	Thr	Ile	Tyr	Lys	Asn
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Tyr	Tyr	Arg	Ile	Gln	Leu	Lys	Pro	Glu	Gln	Phe	Ser	Ser	Tyr	Leu	Thr
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Ser	Pro	Asp	Val	Gly	Phe	Ser	Ser	Tyr	Glu	Leu	Val	Ala	Thr	Pro	His
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															375
Asn	Thr	Ser	Lys	Gly	Phe	Gln	Arg	Pro	Val	Tyr	Leu	Phe	His	Lys	Ala
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Arg	Ser	Pro	Ser	His											405

<210> 6107  
<211> 896  
<212> DNA  
<213> Homo sapiens

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<210> 6108  
<211> 124  
<212> PRT  
<213> Homo sapiens

<400> 6108  
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Gly Leu Ser Ser Asp Leu Arg Gly Ala Ser Gly Leu Leu Leu Pro Ala  
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Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg  
35 40 45  
Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro  
50 55 60  
Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly  
65 70 75 80  
Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

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Ala Pro Arg Ser Trp Leu Leu Pro Leu Ser Ala Thr		
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<210> 6109  
<211> 2087  
<212> DNA  
<213> *Homo sapiens*

<400> 6109  
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 1980  
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<210> 6110  
 <211> 323  
 <212> PRT  
 <213> Homo sapiens

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Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
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Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
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Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
								65				70			75
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ile	Asp	
								85				90			95
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
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Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
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Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
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Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Pro	Gln	His	Trp	His	Asp	

145	150	155	160
Gly Pro Gly Val Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser Ala			
165	170	175	
Leu Arg Ala Cys Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe			
180	185	190	
Glu Gly Leu Ala Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu			
195	200	205	
Leu Cys Leu Ala Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu			
210	215	220	
Ser Leu Arg Leu Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly			
225	230	235	240
Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly			
245	250	255	
Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser			
260	265	270	
Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu			
275	280	285	
Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys			
290	295	300	
Val Ile Leu Leu Leu Ala Gly Phe Ala Leu Leu Thr Gly Leu Leu Phe			
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Ile Gln Ile			

<210> 6111  
<211> 1706  
<212> DNA  
<213> Homo sapiens

<400> 6111  
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180  
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 aatcaccacca tgttaggtgta cattgtgaca aagtgcacatc gaccactaag gggccccctt  
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 1560  
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 1620  
 gctgtgtcac tccctccccc ccccaagtgtctt ttgtgtctc tccatgtca taataaagct  
 1680  
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 1706

<210> 6112  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 6112  
 Met Ser Leu Phe Cys Phe Val Leu Phe Leu Arg Trp Ser Phe Pro Leu  
 1 5 10 15  
 Val Ala Gln Ala Gly Val Xaa Trp His Ser Leu Gly Ser Leu Gln Pro  
 20 25 30  
 Pro Leu Pro Gly Phe Lys Gln Phe Ser Cys Arg Ser Leu Pro Ser Ser  
 35 40 45  
 Trp Asp Tyr Arg His Ala Pro Pro Arg Gln Ala Asn Phe Cys Ile Phe  
 50 55 60  
 Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Gln Thr Pro  
 65 70 75 80  
 Asp Leu Arg Arg Ser Thr His Leu Ser Val Pro Lys Cys Trp Asp Tyr  
 85 90 95  
 Arg Arg Glu Pro Pro His Leu Ala Tyr Glu Trp Ser Phe Asn

100

105

110

<210> 6113  
<211> 1095  
<212> DNA  
<213> Homo sapiens

<400> 6113  
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120  
acgtggcgcc agcggaggca ggttgatgtg tttgtgcttc cttctacagc caatatgaaa  
180  
aggccttagta agtggggtcg ggaggcgccg gtggaggac ccacgtctgg aagttgctgc  
240  
agccaccacg acgctcttc acggctacgg ctgggtctct gctggatgg ggggtggagc  
300  
atacgcgtag gccttggccc tatttcctgg tagaaccgag agttgaaagt ccctacggcg  
360  
atcatgttaa ccgcgcgggc tcattctgcg gaacgaagcc gggcagaggg tggggaaagac  
420  
taggcttagat tttcgtaagg aagcagegtc tgagccaggt ttgaggccca atattttctt  
480  
tccgtggcca cgtcagact ggcgcagggtg agagctgaga atcgctccc agactcagtg  
540  
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600  
atacgctgtt gtgtatgatc ccattctaat attgtgaggg taagtgcagg gaattttgac  
660  
tccattctgg atctactgaa ttaattctc tggatttga aagtagcactg tatgtttgca  
720  
ttaggcattt cgcatagac ttaacgttag gtttggtagc caataacaca agaaaaggat  
780  
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840  
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900  
caaaaaaagg ttcgagaaca tcatcgaaaa ttaagaaagg aggctaaaaa gcggggtcac  
960  
aagaaggccta gaaaaagaccc aggagttcca aacagtgtc cctttaagga ggctcttctt  
1020  
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1080  
aggcagaagg aacta  
1095

<210> 6114  
<211> 87  
<212> PRT  
<213> Homo sapiens

<400> 6114  
Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys

1	5	10	15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys			
20	25	30	
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp			
35	40	45	
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu			
50	55	60	
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys			
65	70	75	80
Leu Asp Arg Gln Lys Glu Leu			
85			

&lt;210&gt; 6115

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6115

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gccgcgcgcc gcagccctcc ttctcggtgg cgctggggaa gaaaactcgtc ggcgggtcta  
120  
actgtggcgt cccaggcgg tggagggagc aacttcgggg gcacgtcctc gttaatcccg  
180  
tggaggacac tgaccctgta ccccacccctc gagggcagaa gtcggttctt ttgggggaac  
240  
tgagggcga gagcactcgc cccctgact tgcaaagttg gcgtctttac ttggcctccg  
300  
ggattctgca catggcgtgt ctccaggctg ctgatggca agacagatgt gccaggtcca  
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411

&lt;210&gt; 6116

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6116

Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val			
1	5	10	15
Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly			
20	25	30	
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala			
35	40	45	
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr			
50	55	60	
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu			
65	70	75	80
Leu Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe			
85	90	95	
Leu Pro Gln Arg Pro Arg Glu Gly Leu Arg Ala Ala Ala Ala Ala			
100	105	110	
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg			

115                    120                    125  
Arg

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<210> 6117
<211> 962
<212> DNA
<213> Homo sapiens

<400> 6117
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120
tcggaggcg acaagatgtt ctccctcaag aagtggAACG cggtggccat gtggagctgg
180
gacgtggagt gcgatacgtg cgccatctgc agggtccagg tcatggatgc ctgtcttaga
240
tgtcaagctg aaaacaaaca agaggactgt gttgtggctt ggggagaatg taatcattcc
300
ttccacaact gctgcattgtc cctgtgggtg aaacagaaca atcgctgcc tctctgccag
360
caggactggg tggtccaaag aatccggaaa tgagagtgg tagaaggctt ctttagcgcag
420
ttgttcagag ccctgggtga tctttaatc cagtgcctta caaaggctag aacactacag
480
gggatgaatt ctcaaatag gagccgatgg atctgtggc ctttggact catcaaagcc
540
ttggtttagc attttgtcag ttttatcttc agaaattctc tgcgattaag aagataattt
600
attnaagggtg gtccctccta cctctgtggt gtgtgtcgac cacacagctt agaagtgtca
660
taaaaaagga aagagctcca aattgaatca cctttataat ttacccatctt ctataacaaca
720
ggcagtggaa gcagtttcag agaactttt gcatgctt ggttgatcag ttaaaaaaaga
780
atgttacagt aacaaataaa gtgcagttt aaccccaact ctactctt atttgttcct
840
aatacgtatt ttggcaggg agagggaaacg gtccatgaaa tctttatgtg atataaggat
900
tttaagtttg ggccagtgaa caggtaaat aaaatttaac ttttgagcat aaaaaaaaaaa
960
aa
962

<210> 6118
<211> 113
<212> PRT
<213> Homo sapiens

<400> 6118
Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His
1                    5                    10                    15
Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu

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20	25	30
Lys Lys Trp Asn Ala Val Ala Met	Trp Ser Trp Asp Val Glu Cys Asp	
35	40	45
Thr Cys Ala Ile Cys Arg Val Gln	Val Met Asp Ala Cys Leu Arg Cys	
50	55	60
Gln Ala Glu Asn Lys Gln Glu Asp Cys	Val Val Val Trp Gly Glu Cys	
65	70	75
Asn His Ser Phe His Asn Cys Cys Met	Ser Leu Trp Val Lys Gln Asn	
85	90	95
Asn Arg Cys Pro Leu Cys Gln Gln Asp	Trp Val Val Gln Arg Ile Gly	
100	105	110

Lys

<210> 6119  
<211> 375  
<212> DNA  
<213> Homo sapiens

<400> 6119  
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cccccacacc ccacacggac tgcacggaaa tatcacagta accatctctc agtcacagcg  
120  
tggccccaca gaactcatgc ctgcttgctt taaacccacc aatgaaaact ccccatggga  
180  
aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtccctgtc  
240  
tctgcctctc tcttgccctt acccactggt tgagcatgtg tgtcccaaac ggccctgcaa  
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tgtgtcatgt tgtgc  
375

<210> 6120  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 6120  
Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His  
1 5 10 15  
Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser  
20 25 30  
Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn  
35 40 45  
Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn  
50 55 60  
Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro  
65 70 75 80  
Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys  
85 90 95  
Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu

100	105	110
Cys Asp Val Ser Cys Cys		
115		

<210> 6121  
<211> 1039  
<212> DNA  
<213> Homo sapiens

<400> 6121  
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120  
aagaaacact ctccctctgc cacatttgtt ttgagctaaa tattgagggg gtaccaaagt  
180  
ctgatctctt gcacaccaaa tcattaaggg gccataaaaga ctgctttgaa aaataccatt  
240  
taatttgc当地 ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta  
300  
aaaccatccc gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg  
360  
attcagatTC tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggataaggc  
420  
cagaagaaaa attactccca cagtttgagt cccaaatgtacc aaaatattct gcaaaatgga  
480  
tagatggaaag tgcagggtggc atctctaact gtacacaaaag aattttggag cagagggaaa  
540  
atacagactt tggactttct atgttacaag attcagggtgc cactttatgt cgtaacagt  
600  
tatttggcc tcatagtcac aaccaggcac agaaaaaaaga agagacaatc tctagtc  
660  
aggctaatgt ccagaccag catccacatt acagcagaga ggaataagtt tttgaagagt  
720  
taactcacca agtgc当地 aaagattttt tggcctcaca gctccatgtc cgccacgtt  
780  
ccatcgaca a gcttctgaag aactgttctta agttaccatg tctgcaagta gggcgaacag  
840  
gaatgaagtc gcacctaccc ataaacaact gacctaaaca gacttacttc gtatgccctg  
900  
ccctttatgt gtctccaga catgcaaact ttgaagaagt ttgaagaaaat ttgtggcc  
960  
ttttttatgt gtcattaaat ttgc当地 aca taaggcagta tttaacatct ttgtcaaata  
1020  
aagcagatca ttatactct  
1039

<210> 6122  
<211> 221  
<212> PRT  
<213> Homo sapiens

<400> 6122  
Met Asn Glu Glu Glu Gln Phe Val Asn Ile Asp Leu Asn Asp Asp Asn

1	5	10	15
Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe			
20	25	30	
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp			
35	40	45	
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys			
50	55	60	
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys			
65	70	75	80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp			
85	90	95	
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys			
100	105	110	
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu			
115	120	125	
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala			
130	135	140	
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg			
145	150	155	160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln			
165	170	175	
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser			
180	185	190	
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala			
195	200	205	
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu			
210	215	220	

&lt;210&gt; 6123

&lt;211&gt; 900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6123

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 240  
 aacaaggctc caggtctgct tcccccaaaa ggactataca tggcaaatga cttaaagctc  
 300  
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ccgcacccgc ttcctgttgt cttctttct tcccagaatg aagacatcac cgagccgcag  
 660  
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 720  
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 780  
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 840  
 ttatggct ctgaccggat ggagctgctg gcgcacctgc tggagagaaa gtggatggc  
 900

&lt;210&gt; 6124

&lt;211&gt; 300

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6124

Xaa	His	Ala	Cys	Ile	Pro	Gln	Leu	Leu	Gly	Arg	Leu	Arg	Arg	Glu	Asn	
1																
														15		
Arg	Leu	Asn	Pro	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His		
														20	30	
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys		
														35	45	
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly	
														50	60	
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly	
														65	80	
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn	
														85	95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro	
														100	110	
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met	
														115	125	
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys	
														130	140	
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly	
														145	160	
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro	
														165	175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Gly	Gly	Ser	Thr		
														180	190	
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe	
														195	205	
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala	
														210	220	
Ala	Ala	Glu	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu		
														225	240	
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr	
														245	255	
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala	
														260	270	
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu	
														275	285	
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly					

290

295

300

<210> 6125  
<211> 468  
<212> DNA  
<213> Homo sapiens

<400> 6125  
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120  
ggagaattga aggggctgca ggagcaaata gcagaaacca aagccccgt tatcacgcag  
180  
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300  
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360  
aagcagctga cccgtgaggt ggaggagctg aaaagtgaac tgcaggccat tcgagatgag  
420  
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468

<210> 6126  
<211> 156  
<212> PRT  
<213> Homo sapiens

<400> 6126  
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Asp Lys Lys Lys Met Lys Gln Asp Leu Glu Asp Ala Ser Asn Lys Ala  
20 25 30  
Glu Glu Glu Arg Ala Arg Leu Glu Gly Glu Leu Lys Gly Leu Gln Glu  
35 40 45  
Gln Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg  
50 55 60  
Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys  
65 70 75 80  
Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu  
85 90 95  
Glu Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln  
100 105 110  
Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu  
115 120 125  
Glu Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro  
130 135 140  
Asp Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala  
145 150 155

<210> 6127  
<211> 1900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6127

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120  
cgggcaagag actccaatat ggtgagggcg gcagcagagc tggccctgag ctgcctgcct  
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300  
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360  
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420  
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780  
ccctcacttg ctgccactgc tgtgttttc cccgttcctt ccatggcacc catcacagta  
840  
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900  
ggccaggggaa cagtgagcag tgtccatcca gcatccacgt ttccagccat ccaagggtgcc  
960  
tcactgcctg ccctgaccac acagcccage cctctggta gcggagggtt tccaccggcc  
1020  
gaggaggaga cacacagtca gccagtcaat ccccacagcc tgcaccacact gcatgctgcc  
1080  
taccgtgtcg gaatgctggc actggagatg ctgggtcgcc gggcacacaa cgatcacccc  
1140  
aacaacttct cccgctcccc cccctacact gatgatgtca aatggttgtt ggggctggca  
1200  
gcaaagctgg gagtgaacta cgtgcaccag ttctgtgtgg gggcagccaa ggggggtgctg  
1260  
agcccgtttg tgctgcagga gatcgcatg gagacgctgc agcggctgag tcccgctcat  
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gcccacaacc acctgcgtgc cccggcccttc caccaactgg tgcagcgtcg ccagcaggca  
1380  
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1440  
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1500

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 1900

&lt;210&gt; 6128

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6128  
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 Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser Asn Met Val  
 35 40 45  
 Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His Ala His Ala  
 50 55 60  
 Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys Lys Glu Gln  
 65 70 75 80  
 Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu Glu Ala Ala  
 85 90 95  
 Lys Gly Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val Ala His Gln  
 100 105 110  
 Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser Thr Ala Arg  
 115 120 125  
 Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala Gly Gly Glu  
 130 135 140  
 Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly Thr Glu Pro  
 145 150 155 160  
 Val Thr Val Ala Ala Ala Ala Val Thr Ala Ala Ala Thr Val Val Pro  
 165 170 175  
 Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly Leu Gly His  
 180 185 190  
 Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln Pro His Leu  
 195 200 205  
 Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro Ala His Pro  
 210 215 220  
 Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro Ser Ser Ala  
 225 230 235 240  
 Tyr Pro Gln Gly Val His Pro Ala Phe Leu Gly Ala Gln Tyr Pro Tyr  
 245 250 255  
 Ser Val Thr Pro Pro Ser Leu Ala Ala Val Ser Phe Pro Val

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Pro Ser Met Ala Pro Ile Thr Val His Pro Tyr His Thr Glu Pro Gly		
275	280	285
Leu Pro Leu Pro Thr Ser Val Ala Cys Glu Leu Trp Gly Gln Gly Thr		
290	295	300
Val Ser Ser Val His Pro Ala Ser Thr Phe Pro Ala Ile Gln Gly Ala		
305	310	315
Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser Pro Leu Val Ser Gly Gly		
325	330	335
Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His		
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Ser Leu His His Leu His Ala Ala Tyr Arg Val Gly Met Leu Ala Leu		
355	360	365
Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser		
370	375	380
Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala		
385	390	395
Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala		
405	410	415
Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr		
420	425	430
Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro		
435	440	445
Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr		
450	455	460
Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe		
465	470	475
Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met		
485	490	495
Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys		
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<211> 2012  
<212> DNA  
<213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

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Gly Pro Arg Leu Phe Leu Leu Gln Gln Pro Leu Ala Pro Ser Gly Leu  
35 40 45  
Thr Leu Lys Ser Glu Ala Leu Arg Asn Trp Gln Val Tyr Arg Leu Val  
50 55 60  
Thr Tyr Ile Phe Val Tyr Glu Asn Pro Ile Ser Leu Leu Cys Gly Ala  
65 70 75 80  
Ile Ile Ile Trp Arg Phe Ala Gly Asn Phe Glu Arg Thr Val Gly Thr  
85 90 95  
Val Arg His Cys Phe Phe Thr Val Ile Phe Ala Ile Phe Ser Ala Ile  
100 105 110  
Ile Phe Leu Ser Phe Glu Ala Val Ser Ser Leu Ser Lys Leu Gly Glu  
115 120 125  
Val Glu Asp Ala Arg Gly Phe Thr Pro Val Ala Phe Ala Met Leu Gly  
130 135 140  
Val Thr Thr Val Arg Ser Arg Met Arg Arg Ala Leu Val Phe Gly Met  
145 150 155 160  
Val Val Pro Ser Val Leu Val Pro Trp Leu Leu Leu Gly Ala Ser Trp  
165 170 175  
Leu Ile Pro Gln Thr Ser Phe Leu Ser Asn Val Cys Gly Leu Ser Ile  
180 185 190  
Gly Leu Ala Tyr Gly Leu Thr Tyr Cys Tyr Ser Ile Asp Leu Ser Glu  
195 200 205  
Arg Val Ala Leu Lys Leu Asp Gln Thr Phe Pro Phe Ser Leu Met Arg  
210 215 220  
Arg Ile Ser Val Phe Lys Tyr Val Ser Gly Ser Ser Ala Glu Arg Arg  
225 230 235 240  
Ala Ala Gln Ser Arg Lys Leu Asn Pro Val Pro Gly Ser Tyr Pro Thr  
245 250 255  
Gln Ser Cys His Pro His Leu Ser Pro Ser His Pro Val Ser Gln Thr  
260 265 270  
Gln His Ala Ser Gly Gln Lys Leu Ala Ser Trp Pro Ser Cys Thr Pro  
275 280 285  
Gly His Met Pro Thr Leu Pro Pro Tyr Gln Pro Ala Ser Gly Leu Cys  
290 295 300  
Tyr Val Gln Asn His Phe Gly Pro Asn Pro Thr Ser Ser Ser Val Tyr  
305 310 315 320  
Pro Ala Ser Ala Gly Thr Ser Leu Gly Ile Gln Pro Pro Thr Pro Val  
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<211> 3526  
<212> DNA  
<213> Homo sapiens

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3000

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 <212> PRT  
 <213> Homo sapiens

<400> 6132  
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 35 40 45  
 Val Pro Ile Val Ile Gln Asp Asp Ser Leu Pro Ala Gly Pro Pro Pro  
 50 55 60  
 Gln Ile Arg Ile Leu Lys Arg Pro Thr Ser Asn Gly Val Val Ser Ser  
 65 70 75 80  
 Pro Asn Ser Thr Ser Arg Pro Thr Leu Pro Val Lys Ser Leu Ala Gln  
 85 90 95  
 Arg Glu Ala Glu Tyr Ala Glu Ala Arg Lys Arg Ile Leu Gly Ser Ala  
 100 105 110  
 Ser Pro Glu Glu Gln Glu Lys Pro Ile Leu Asp Arg Ser Ser Ser  
 115 120 125  
 Asp Leu Leu Pro Phe Arg Pro Thr Arg Ile Ser Gln Pro Glu Asp Ser  
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 <212> DNA  
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<400> 6133

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 3660  
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 3720  
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 3780  
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 3840  
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 3900  
 tcctcagagc gtggtagccg actgtgagga aaagcagagg gaatgtgaaa gaaaataaga  
 3960  
 gaatccacgg gatttgatgc ctggaaagatt ctccctcaag tggcaacatg gcatatatat  
 4020  
 ccttctccgg ggagtcacat gcaccattt gttcttagat acgttgatgt tttgatTTT  
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 4140  
 ttacaaata tagtgg  
 4156

<210> 6134  
 <211> 595  
 <212> PRT  
 <213> Homo sapiens

<400> 6134  
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 1 5 10 15  
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 20 25 30  
 Pro Asp Val Gly Gly Gly Trp Leu Glu Gly Arg Asn Ile Lys Gly Glu  
 35 40 45  
 Arg Gly Leu Val Pro Thr Asp Tyr Val Glu Ile Leu Pro Ser Asp Gly  
 50 55 60  
 Lys Asp Gln Phe Ser Cys Gly Asn Ser Val Ala Asp Gln Ala Phe Leu  
 65 70 75 80  
 Asp Ser Leu Ser Ala Ser Thr Ala Gln Ala Ser Ser Ser Ala Ala Ser  
 85 90 95  
 Asn Asn His Gln Val Gly Ser Gly Asn Asp Pro Trp Ser Ala Trp Ser  
 100 105 110  
 Ala Ser Lys Ser Gly Asn Trp Glu Ser Ser Glu Gly Trp Gly Ala Gln

115	120	125
Pro Glu Gly Ala Gly Ala Gln Arg Asn Thr Asn Thr Pro Asn Asn Trp		
130	135	140
Asp Thr Ala Phe Gly His Pro Gln Ala Tyr Gln Gly Pro Ala Thr Gly		
145	150	155
Asp Asp Asp Asp Trp Asp Glu Asp Trp Asp Gly Pro Lys Ser Ser Ser		160
165	170	175
Tyr Phe Lys Asp Ser Glu Ser Ala Asp Ala Gly Gly Ala Gln Arg Gly		
180	185	190
Asn Ser Arg Ala Ser Ser Ser Met Lys Ile Pro Leu Asn Lys Phe		
195	200	205
Pro Gly Phe Ala Lys Pro Gly Thr Glu Gln Tyr Leu Leu Ala Lys Gln		
210	215	220
Leu Ala Lys Pro Lys Glu Lys Ile Pro Ile Ile Val Gly Asp Tyr Gly		
225	230	235
Pro Met Trp Val Tyr Pro Thr Ser Thr Phe Asp Cys Val Val Ala Asp		240
245	250	255
Pro Arg Lys Gly Ser Lys Met Tyr Gly Leu Lys Ser Tyr Ile Glu Tyr		
260	265	270
Gln Leu Thr Pro Thr Asn Thr Asn Arg Ser Val Asn His Arg Tyr Lys		
275	280	285
His Phe Asp Trp Leu Tyr Glu Arg Leu Leu Val Lys Phe Gly Ser Ala		
290	295	300
Ile Pro Ile Pro Ser Leu Pro Asp Lys Gln Val Thr Gly Arg Phe Glu		
305	310	315
Glu Glu Phe Ile Lys Met Arg Met Glu Arg Leu Gln Ala Trp Met Thr		320
325	330	335
Arg Met Cys Arg His Pro Val Ile Ser Glu Ser Glu Val Phe Gln Gln		
340	345	350
Phe Leu Asn Phe Arg Asp Glu Lys Glu Trp Lys Thr Gly Lys Arg Lys		
355	360	365
Ala Glu Arg Asp Glu Leu Ala Gly Val Met Ile Phe Ser Thr Met Glu		
370	375	380
Pro Glu Ala Pro Asp Leu Asp Leu Val Glu Ile Glu Gln Lys Cys Glu		
385	390	395
Ala Val Gly Lys Phe Thr Lys Ala Met Asp Asp Gly Val Lys Glu Leu		400
405	410	415
Leu Thr Val Gly Gln Glu His Trp Lys Arg Cys Thr Gly Pro Leu Pro		
420	425	430
Lys Glu Tyr Gln Lys Ile Gly Lys Ala Leu Gln Ser Leu Ala Thr Val		
435	440	445
Phe Ser Ser Ser Gly Tyr Gln Gly Glu Thr Asp Leu Asn Asp Ala Ile		
450	455	460
Thr Glu Ala Gly Lys Thr Tyr Glu Glu Ile Ala Ser Leu Val Ala Glu		
465	470	475
Gln Pro Lys Lys Asp Leu His Phe Leu Met Glu Cys Asn His Glu Tyr		480
485	490	495
Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
500	505	510
Ala Ile Glu Lys Val Lys Glu Ser Asp Lys Leu Val Ala Thr Ser Lys		
515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

545	550	555	560
Tyr Asp Tyr Asn Ser Val Ile Arg Leu Tyr Leu Glu Gln Gln			
565	570	575	
Phe Tyr Glu Thr Ile Ala Glu Lys Leu Arg Gln Ala Leu Ser Arg Phe			
580	585	590	
Pro Val Met			
595			

<210> 6135  
<211> 526  
<212> DNA  
<213> Homo sapiens

<400> 6135  
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tgctactaga aaagacccgg cttgaagagc catctcatca acatgttacg cagggaaacac  
120  
aggccaaacc agggtatcag ccatctggag aatctgacaa agaaaacaaa gtacagggAAC  
180  
gtcccccaag tgcgtcttcc agtagtgaca tgtctcttc agaacctcca cagcctcttgc  
240  
caagaaaaga cttgatggaa tctacatggta tgccgcctga aagattgagc ccacaagtTC  
300  
accattctca accacagccct tttgctggaa cagctggaaat tttactcttc catctttga  
360  
gttagagca tgttaggaatt ttgcataagg attttgaatc tatTTTACCA accagggAAGA  
420  
atcataatat ggcttcaagg ccatTAactt ttacacctca accatATG acctcaccAG  
480  
ctgcttatac agatgccttg gtaaaaccta gtgccagCCA atataa  
526

<210> 6136  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 6136  
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Glu Ser Thr Trp Met Gln Pro Glu Arg Leu Ser Pro Gln Val His His  
20 25 30  
Ser Gln Pro Gln Pro Phe Ala Gly Thr Ala Gly Ser Leu Leu Ser His  
35 40 45  
Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser  
50 55 60  
Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr  
65 70 75 80  
Phe Thr Pro Gln Pro Tyr Val Thr Ser Pro Ala Ala Tyr Thr Asp Ala  
85 90 95  
Leu Val Lys Pro Ser Ala Ser Gln Tyr  
100 105

<210> 6137  
<211> 2073  
<212> DNA  
<213> Homo sapiens

<400> 6137  
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ggtgacgcac tttacggcg cagcgtaagt gcgtgacgct cgtcagtggc ttcagttcac  
120  
acgtggcgcc agcggaggca ggttgctgtg tttgtcttc cttctacagc caatatgaaa  
180  
aggcctaagt taaagaaagc aagtaaacgc atgacctgcc ataagcggtt taaaatccaa  
240  
aaaaagggttc gagaacatca tcgaaaattt agaaaggagg ctaaaaagca gggtcacaag  
300  
aagcctagga aagacccagg agttccaaac agtgctccct ttaaggaggc ttttcttagg  
360  
gaagctgagc taaggaaaca gaggcttcaa gaactaaaac agcagcagaa acttgacagg  
420  
cagaaggaac tagaaaagaa aagaaaactt gaaactaattc ctgatattaa gnccatcaaa  
480  
tgtggAACN ntatggaaaa ggagtttggg ctttgcaaaa ctgagaacaa agccaagtcg  
540  
ggcaaacaga attcaaagaa gctgtactgc caagaactta aaaaggttat tgaaggctcc  
600  
gatgttgc tagaggttttggatgccccaga gatcctcttgc ttgcagatg tcctcaggta  
660  
gaagaggcca ttgtccagag tggacagaaa aagctggatc ttatattttaa taaatcagat  
720  
ctggtagccaa aggagaattt ggagagctgg ctaaattttt tgaagaaaga attgccaaca  
780  
gtgggttca gagcctcaac aaaaccaaaag gataaaggaa agataaccaa gcgtgtgaag  
840  
gcaaaaaga atgctgtcc attcagaagt gaagtctgtc ttggaaaga gggccttgg  
900  
aaaccttgc gagggtttca ggaaacttgc agcaaagcca ttccgggttgg agtaattgg  
960  
ttccccaaatg tggggaaaaag cagcattatc aatagcttaa aacaagaaca gatgtgtat  
1020  
gttgggttat ccattgggttca tacaaggagc atgcaagtttgc tccccttggaa caaacagatc  
1080  
acaatcatag atagtcggag cttcatcgta tctccactta attcctccctc tgccgttgc  
1140  
ctgcgaagtc cagcaagtat tgaagtagta aaaccgatgg aggtgtccag tgccatccctt  
1200  
tcccaggctg atgctcgaca ggttagtactg aaatatactg tcccaggcttca caggaattct  
1260  
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1320  
aatgttgaag gtgtgtccaa actgtgtgg tctgtgtgg caggtgcctc attagcttac  
1380  
tattgtccatc cccctacatc ttggactcct cctccatatt ttaatgagag tattgtggta  
1440

gacatgaaaa gcggcttcaa tctgaaagaa ctggaaaaga acaatgcaca gagcataaga  
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 1680  
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 1860  
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 1920  
 aaatTTgtg aatatgtatt atattaaac caggcaactt ggaatcccta aattctgtaa  
 1980  
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 2040  
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 2073

<210> 6138  
 <211> 550  
 <212> PRT  
 <213> Homo sapiens

<400> 6138  
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 Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys Leu  
 20 25 30  
 Arg Lys Glu Ala Lys Lys Gln Gly His Lys Lys Pro Arg Lys Asp Pro  
 35 40 45  
 Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Arg Glu Ala  
 50 55 60  
 Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys Leu  
 65 70 75 80  
 Asp Arg Gln Lys Glu Leu Glu Lys Lys Arg Lys Leu Glu Thr Asn Pro  
 85 90 95  
 Asp Ile Lys Xaa Ile Lys Cys Gly Thr Xaa Met Glu Lys Glu Phe Gly  
 100 105 110  
 Leu Cys Lys Thr Glu Asn Lys Ala Lys Ser Gly Lys Gln Asn Ser Lys  
 115 120 125  
 Lys Leu Tyr Cys Gln Glu Leu Lys Lys Val Ile Glu Ala Ser Asp Val  
 130 135 140  
 Val Leu Glu Val Leu Asp Ala Arg Asp Pro Leu Gly Cys Arg Cys Pro  
 145 150 155 160  
 Gin Val Glu Glu Ala Ile Val Gln Ser Gly Gln Lys Lys Leu Val Leu  
 165 170 175  
 Ile Leu Asn Lys Ser Asp Leu Val Pro Lys Glu Asn Leu Glu Ser Trp  
 180 185 190  
 Leu Asn Tyr Leu Lys Glu Leu Pro Thr Val Val Phe Arg Ala Ser

195	200	205
Thr Lys Pro Lys Asp Lys Gly	Ile Thr Lys Arg Val	Lys Ala Lys
210	215	220
Lys Asn Ala Ala Pro Phe Arg Ser Glu Val Cys	Phe Gly Lys	Glu Gly
225	230	235
Leu Trp Lys Leu Leu Gly Gly Phe Gln Glu	Thr Cys Ser Lys	Ala Ile
245	250	255
Arg Val Gly Val Ile Gly Phe Pro Asn Val	Gly Lys Ser Ser	Ile Ile
260	265	270
Asn Ser Leu Lys Gln Glu Gln Met Cys Asn Val	Gly Val Ser Met	Gly
275	280	285
Leu Thr Arg Ser Met Gln Val Val Pro Leu Asp	Lys Gln Ile Thr	Ile
290	295	300
Ile Asp Ser Pro Ser Phe Ile Val Ser Pro Leu	Asn Ser Ser Ser	Ala
305	310	315
Leu Ala Leu Arg Ser Pro Ala Ser Ile Glu Val	Val Lys Pro Met	Glu
325	330	335
Ala Ala Ser Ala Ile Leu Ser Gln Ala Asp Ala	Arg Gln Val Val	Leu
340	345	350
Lys Tyr Thr Val Pro Gly Tyr Arg Asn Ser Leu	Glu Phe Phe Thr	Val
355	360	365
Leu Ala Gln Arg Arg Gly Met His Gln Lys Gly	Gly Ile Pro Asn Val	
370	375	380
Glu Gly Ala Ala Lys Leu Leu Trp Ser Glu Trp	Thr Gly Ala Ser	Leu
385	390	395
Ala Tyr Tyr Cys His Pro Pro Thr Ser Trp Thr	Pro Pro Pro Tyr Phe	
405	410	415
Asn Glu Ser Ile Val Val Asp Met Lys Ser Gly	Phe Asn Leu Glu Glu	
420	425	430
Leu Glu Lys Asn Asn Ala Gln Ser Ile Arg Ala	Ile Lys Gly Pro His	
435	440	445
Leu Ala Asn Ser Ile Leu Phe Gln Ser Ser	Gly Leu Thr Asn Gly	Ile
450	455	460
Ile Glu Glu Lys Asp Ile His Glu Glu Leu Pro	Lys Arg Lys Glu Arg	
465	470	475
Lys Gln Glu Glu Arg Glu Asp Asp Lys Asp Ser	Asp Gln Glu Thr Val	
485	490	495
Asp Glu Glu Val Asp Glu Asn Ser Ser	Gly Met Phe Ala Ala Glu Glu	
500	505	510
Thr Gly Glu Ala Leu Ser Glu Glu Thr Thr	Ala Gly Glu Gln Ser	Thr
515	520	525
Arg Ser Phe Ile Leu Asp Lys Ile Ile Glu Glu	Asp Asp Ala Tyr Asp	
530	535	540
Phe Ser Thr Asp Tyr Val		
545	550	

&lt;210&gt; 6139

&lt;211&gt; 2249

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6139

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60

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120 acagacgatg atggccaggg cccggaggct aaggacggca gtccttttag cgccagagtt  
180 ttccgagtga ctttcttgat gtcggctgtt tcttcaccc ttcccctgtc tggagccatg  
240 atgctctgg aatctccat agatccacag cctctcagct tcaaagaacc cccgtcttg  
300 ctgggtgttc tgcatccaaa tacgaagctg cgacaggcag aaaggctgtt tgaaaatcaa  
360 cttgttggac cggagtcac agcacatatt ggggatgtga tgtttactgg gacagcagat  
420 ggccgggtcg taaaacttga aaatggtgaa atagagacca ttgcccgggtt tnggttcggg  
480 cccnnttgc aAACCCGAGA tgcgtggat gtgtgtggg gacccctggg tatccgtca  
540 gggcccaatg ggactcttt tgtggccat gcatacaagg gactatttga agtaaatccc  
600 tggaaacgtg aagtgaaact gtcgtgtcc tccgagacac ccattgaggga gaagaacatg  
660 tcctttgtga atgatcttac agtcaactcag gatgggagga agatttattt caccgattct  
720 agcagcaaat ggcaaagacg agactacctg cttctggta tggagggcac agatgacggg  
780 cgcctgctgg agtatgatac tgtgaccagg gaagttttttt ccagctgcgg  
840 ttcccgaatg gagtccagct gtctctgca gaagacttttgc agaaacaacc  
900 atggccagga tacgaagagt ctacgttttgc ggcctgtatga agggcgcccc tgcgtgttt  
960 gtggagaaca tgcctggatt tccagacaac atccggccca gcagctctgg ggggtactgg  
1020 gtgggcgtgt cgaccatccg ccctaaccctt gggttttcca tgcgtggattt cttatctgag  
1080 agaccctggta ttAAAAGGAT gatttttaag ggaagctgcg ctgggtgtga tctgccttt  
1140 agtcaagaga cgggtatgaa gtttgtcccg cggtagcagcc tgcgtctaga actcagcgac  
1200 agcgggtgcct tccggagaag cctgcgtatgc cccgtggcc tggggccac ctacatcagc  
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1320 agactcagcc tccaggctgt ttagccctcc cagatagctg cccctgcac gcaggccagg  
1380 agtcttcaca ctcaggcacc aggctggtc caggaggagc tgcgtggatc  
1440 aagtgtccac atgcacccgt tagtccctga gaggtggatgg gaatggctgc ttcatccctc  
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1560 gccatgagga acataaaattt atgtaaagcc attttctttt aaacaaaaca aaactttcta  
1620 agtacagtca ttctcttagga tttggaaagc tccttgact tggAACAGGG ctcagggtggg  
1680

tggaggcagta aggcaactacc cagagagctt gctgctgcgg ccctgtccctg cggcctcaaa  
 1740  
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 1860  
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 1920  
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 1980  
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 2160  
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 2220  
 tgattaacct taaaaaaaaaaaaaaa  
 2249

<210> 6140  
<211> 381  
<212> PRT  
<213> Homo sapiens

<400> 6140  
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 20 25 30  
 Leu Leu Leu Gly Val Leu His Pro Asn Thr Lys Leu Arg Gln Ala Glu  
 35 40 45  
 Arg Leu Phe Glu Asn Gln Leu Val Gly Pro Glu Ser Ile Ala His Ile  
 50 55 60  
 Gly Asp Val Met Phe Thr Gly Thr Ala Asp Gly Arg Val Val Lys Leu  
 65 70 75 80  
 Glu Asn Gly Glu Ile Glu Thr Ile Ala Arg Phe Xaa Phe Gly Pro Xaa  
 85 90 95  
 Cys Lys Thr Arg Asp Asp Glu Pro Val Cys Gly Arg Pro Leu Gly Ile  
 100 105 110  
 Arg Ala Gly Pro Asn Gly Thr Leu Phe Val Ala Asp Ala Tyr Lys Gly  
 115 120 125  
 Leu Phe Glu Val Asn Pro Trp Lys Arg Glu Val Lys Leu Leu Ser  
 130 135 140  
 Ser Glu Thr Pro Ile Glu Gly Lys Asn Met Ser Phe Val Asn Asp Leu  
 145 150 155 160  
 Thr Val Thr Gln Asp Gly Arg Lys Ile Tyr Phe Thr Asp Ser Ser Ser  
 165 170 175  
 Lys Trp Gln Arg Arg Asp Tyr Leu Leu Val Met Glu Gly Thr Asp  
 180 185 190  
 Asp Gly Arg Leu Leu Glu Tyr Asp Thr Val Thr Arg Glu Val Lys Val  
 195 200 205  
 Leu Leu Asp Gln Leu Arg Phe Pro Asn Gly Val Gln Leu Ser Pro Ala

210	215	220													
Glu	Asp	Phe	Val	Leu	Val	Ala	Glu	Thr	Thr	Met	Ala	Arg	Ile	Arg	Arg
225				230			235				240				
Val	Tyr	Val	Ser	Gly	Leu	Met	Lys	Gly	Gly	Ala	Asp	Leu	Phe	Val	Glu
				245			250			255					
Asn	Met	Pro	Gly	Phe	Pro	Asp	Asn	Ile	Arg	Pro	Ser	Ser	Ser	Gly	Gly
				260			265			270					
Tyr	Trp	Val	Gly	Met	Ser	Thr	Ile	Arg	Pro	Asn	Pro	Gly	Phe	Ser	Met
				275			280			285					
Leu	Asp	Phe	Leu	Ser	Glu	Arg	Pro	Trp	Ile	Lys	Arg	Met	Ile	Phe	Lys
				290			295			300					
Gly	Ser	Cys	Ala	Gly	Cys	Asp	Leu	Leu	Phe	Ser	Gln	Glu	Thr	Val	Met
305				310			315				320				
Lys	Phe	Val	Pro	Arg	Tyr	Ser	Leu	Val	Leu	Glu	Leu	Ser	Asp	Ser	Gly
				325			330			335					
Ala	Phe	Arg	Arg	Ser	Leu	His	Asp	Pro	Asp	Gly	Leu	Val	Ala	Thr	Tyr
				340			345			350					
Ile	Ser	Glu	Val	His	Glu	His	Asp	Gly	His	Leu	Tyr	Leu	Gly	Ser	Phe
				355			360			365					
Arg	Ser	Pro	Phe	Leu	Cys	Arg	Leu	Ser	Leu	Gln	Ala	Val			
				370			375			380					

&lt;210&gt; 6141

&lt;211&gt; 5651

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6141

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 120  
 gggccacacgc ggccgcgcgc cggccctcgct ccgcccgcctcc acgcctcgcg ggatccgcgg  
 180  
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 780

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840  
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900  
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960  
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1020  
atcagcattt atcaagtctt acaggagcat cagcacagag actctgacct gttttgttg  
1080  
gacacccgtg tagtatggc ctcagaagaa ggctggctgg aatttgacat cacggccact  
1140  
agaatctgt gggtgtgac tccacagcat aacatggggc tttagctgag cgtggtgaca  
1200  
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gatacgacgc cttcatggt ggctttcttc aaagttagtgg aggtccacgt ggcacaccacc  
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1380  
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<211> 513  
<212> PRT  
<213> Homo sapiens

<400> 6142  
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Ala Ala Ala Ala Ala Ala Gly Gly Gln Leu Leu Gly Asp Gly Gly  
35 40 45  
Ser Pro Gly Arg Thr Glu Gln Pro Pro Pro Ser Pro Gln Ser Ser Ser  
50 55 60  
Gly Phe Leu Tyr Arg Arg Leu Lys Thr Gln Glu Lys Arg Glu Met Gln  
65 70 75 80  
Lys Glu Ile Leu Ser Val Leu Gly Leu Pro His Arg Pro Arg Pro Leu  
85 90 95  
His Gly Leu Gln Gln Pro Gln Pro Pro Ala Leu Arg Gln Gln Glu Glu  
100 105 110  
Gln Gln Gln Gln Gln Leu Pro Arg Gly Glu Pro Pro Pro Gly Arg  
115 120 125  
Leu Lys Ser Ala Pro Leu Phe Met Leu Asp Leu Tyr Asn Ala Leu Ser  
130 135 140  
Ala Asp Asn Asp Glu Asp Gly Ala Ser Glu Gly Glu Arg Gln Gln Ser  
145 150 155 160  
Trp Pro His Glu Ala Ala Ser Ser Ser Gln Arg Arg Gln Pro Pro Pro  
165 170 175  
Gly Ala Ala His Pro Leu Asn Arg Lys Ser Leu Leu Ala Pro Gly Ser  
180 185 190  
Gly Ser Gly Gly Ala Ser Pro Leu Thr Ser Ala Gln Asp Ser Ala Phe  
195 200 205  
Leu Asn Asp Ala Asp Met Val Met Ser Phe Val Asn Leu Val Glu Tyr  
210 215 220  
Asp Lys Glu Phe Ser Pro Arg Gln Arg His His Lys Glu Phe Lys Phe  
225 230 235 240  
Asn Leu Ser Gln Ile Pro Glu Gly Val Val Thr Ala Ala Glu Phe  
245 250 255  
Arg Ile Tyr Lys Asp Cys Val Met Gly Ser Phe Lys Asn Gln Thr Phe  
260 265 270  
Leu Ile Ser Ile Tyr Gln Val Leu Gln Glu His Gln His Arg Asp Ser  
275 280 285  
Asp Leu Phe Leu Leu Asp Thr Arg Val Val Trp Ala Ser Glu Glu Gly  
290 295 300  
Trp Leu Glu Phe Asp Ile Thr Ala Thr Ser Asn Leu Trp Val Val Thr  
305 310 315 320  
Pro Gln His Asn Met Gly Leu Gln Leu Ser Val Val Thr Arg Asp Gly  
325 330 335  
Val His Val His Pro Arg Ala Ala Gly Leu Val Gly Arg Asp Gly Pro  
340 345 350  
Tyr Asp Lys Gln Pro Phe Met Val Ala Phe Phe Lys Val Ser Glu Val

355	360	365
His Val Arg Thr Thr Arg Ser Ala Ser Ser Arg	Arg Arg Gln Gln Ser	
370	375	380
Arg Asn Arg Ser Thr Gln Ser Gln Asp Val Ala	Arg Val Ser Ser Ala	
385	390	395
Ser Asp Tyr Asn Ser Ser Glu Leu Lys Thr Ala	Cys Arg Lys His Glu	
405	410	415
Leu Tyr Val Ser Phe Gln Asp Leu Gly Trp Gln Asp Trp	Ile Ile Ala	
420	425	430
Pro Lys Gly Tyr Ala Ala Asn Tyr Cys Asp Gly	Glu Cys Ser Phe Pro	
435	440	445
Leu Asn Ala His Met Asn Ala Thr Asn His Ala	Ile Val Gln Thr Leu	
450	455	460
Val His Leu Met Asn Pro Glu Tyr Val Pro Lys	Pro Cys Cys Ala Pro	
465	470	475
Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr Phe	Asn Asp Asn Ser Lys	
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Cys		

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<212> DNA  
<213> Homo sapiens

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720  
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 <212> PRT  
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 20               25               30  
 Ser Gly Ser Arg Gln Ala Trp Val His Pro Pro Ala Gln Pro Arg Thr  
 35               40               45  
 Ala Gly Pro Glu Leu Gly Gly Ile Pro Ser Pro Gly Cys Ala  
 50               55               60  
 Cys Gln Arg Gly Glu Ala Gly Gly Gly Asn Ala Val Leu Pro Gln  
 65               70               75               80  
 Glu Ser Val Leu Arg Ala Ser Ala Val Gly Arg Gly Ala Glu Gly Pro  
 85               90               95  
 Gly Ala Leu Thr Arg Ser Gly Ser Gly Ala Ala Ser Ala Leu Val Arg  
 100              105              110  
 Pro Gly Glu Lys Gly Cys Trp Cys Arg Thr Ala Ser Gly Ala Gly Pro  
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 Ser Gly Asp Arg Gly Pro Glu Val Gln Val Pro Gly Gly  
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 <212> PRT  
 <213> Homo sapiens

<400> 6146  
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 35 40 45  
 Gln Pro Pro Pro Val Lys Cys Gln Glu Thr Cys Ala Pro Lys Thr Lys  
 50 55 60  
 Asp Pro Cys Ala Pro Gln Val Lys Lys Gln Cys Pro Pro Lys Asp Thr  
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 <211> 1852  
 <212> DNA  
 <213> Homo sapiens

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 240  
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1852

&lt;210&gt; 6148

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<212> PRT  
<213> Homo sapiens

<400> 6148

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Gly	Trp	Ile	Lys	Lys	Gly	Thr	Asp	Val	Asp	Val	Gly	Pro	Phe	Leu	Asn
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Phe	Asn	Leu	Asp	Ile	Arg	Arg	Ala	Ile	Gln	Ile	Leu	Asn	Glu	Gly	Ala
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Ser	Ser	Glu	Lys	Gly	Asp	Leu	Asn	Leu	Asn	Val	Val	Ala	Met	Ala	Leu
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Ser	Gly	Tyr	Thr	Asp	Glu	Lys	Asn	Ser	Leu	Trp	Arg	Glu	Met	Cys	Ser
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Thr	Leu	Arg	Leu	Gln	Leu	Asn	Asn	Pro	Tyr	Leu	Cys	Val	Met	Phe	Ala
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Phe	Leu	Thr	Ser	Glu	Thr	Gly	Ser	Tyr	Asp	Gly	Val	Leu	Tyr	Glu	Asn
									130	135					140
Lys	Val	Ala	Val	Arg	Asp	Arg	Val	Ala	Phe	Ala	Cys	Lys	Phe	Leu	Ser
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Asp	Thr	Gln	Leu	Asn	Arg	Tyr	Ile	Glu	Lys	Leu	Thr	Asn	Glu	Met	Lys
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Glu	Ala	Gly	Asn	Leu	Glu	Gly	Ile	Leu	Leu	Thr	Gly	Leu	Thr	Lys	Asp
									180	185					190
Gly	Val	Asp	Leu	Met	Glu	Ser	Tyr	Val	Asp	Arg	Thr	Gly	Asp	Val	Gln
									195	200					205
Thr	Ala	Ser	Tyr	Cys	Met	Leu	Gln	Gly	Ser	Pro	Leu	Asp	Val	Leu	Lys
									210	215					220
Asp	Glu	Arg	Val	Gln	Tyr	Trp	Ile	Glu	Asn	Tyr	Arg	Asn	Leu	Leu	Asp
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Ala	Trp	Arg	Phe	Trp	His	Lys	Arg	Ala	Glu	Phe	Asp	Ile	His	Arg	Ser
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Lys	Leu	Asp	Pro	Ser	Ser	Lys	Pro	Leu	Ala	Gln	Val	Phe	Val	Ser	Cys
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Asn	Phe	Cys	Gly	Lys	Ser	Ile	Ser	Tyr	Ser	Cys	Ser	Ala	Val	Pro	His
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Gln	Gly	Arg	Gly	Phe	Ser	Gln	Tyr	Gly	Val	Ser	Gly	Ser	Pro	Thr	Lys
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Ala	Leu	Cys	Leu	Ile	Asn	Met	Gly	Thr	Pro	Val	Ser	Ser	Cys	Pro	Gly
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Gly	Thr	Lys	Ser	Asp	Glu	Lys	Val	Asp	Leu	Ser	Lys	Asp	Lys	Leu	
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Ala	Gln	Phe	Asn	Asn	Trp	Phe	Thr	Trp	Cys	His	Asn	Cys	Arg	His	Gly
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Gly	His	Ala	Gly	His	Met	Leu	Ser	Trp	Phe	Arg	Asp	His	Ala	Glu	Cys
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Pro	Val	Ser	Ala	Cys	Thr	Cys	Lys	Cys	Met	Gln	Leu	Asp	Thr	Thr	Gly

385                   390                   395                   400  
Asn Leu Val Pro Ala Glu Thr Val Gln Pro  
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<210> 6149  
<211> 1949  
<212> DNA  
<213> Homo sapiens

<400> 6149  
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240  
aaagcaccac agcaggaaga gctccccc agcagcgaca tggtgagaa gcagactgg  
300  
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420  
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480  
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 1920  
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 1949

<210> 6150  
 <211> 508  
 <212> PRT  
 <213> Homo sapiens

<400> 6150  
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 35 40 45  
 Lys Glu Val Arg Glu Arg Ala Ser Lys Arg Lys Leu Pro Phe Thr Ala  
 50 55 60  
 Gly Ala Asn Gly Glu Gln Lys Asp Ser Asp Thr Glu Lys Gln Gly Pro  
 65 70 75 80  
 Glu Arg Lys Arg Ile Lys Lys Glu Pro Val Thr Arg Lys Ala Gly Leu  
 85 90 95  
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 100 105 110  
 Glu Arg Gln Gln Val Ala Leu Leu Met Gln Met Thr Ala Glu Glu Ser  
 115 120 125  
 Ala Asn Ser Pro Val Asp Thr Thr Pro Lys His Pro Ser Gln Ser Thr  
 130 135 140  
 Val Cys Gln Lys Gly Thr Pro Asn Ser Ala Ser Lys Thr Lys Asp Lys  
 145 150 155 160  
 Leu Asn Lys Arg Asn Glu Arg Gly Glu Thr Arg Leu His Arg Ala Ala  
 165 170 175  
 Ile Arg Gly Asp Ala Arg Arg Ile Lys Glu Leu Ile Ser Glu Gly Ala  
 180 185 190  
 Asp Val Asn Val Lys Asp Phe Ala Gly Trp Thr Ala Leu His Glu Ala

195	200	205
Cys Asn Arg Gly Tyr Tyr Asp Val Ala Lys Gln Leu	Leu Ala Ala Gly	
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Ala Glu Val Asn Thr Lys Gly Leu Asp Asp Asp	Thr Pro Leu His Asp	
225	230	235
Ala Ala Asn Asn Gly His Tyr Lys Val Val Lys	Leu Leu Arg Tyr	
245	250	255
Gly Gly Asn Pro Gln Gln Ser Asn Arg Lys Gly	Glu Thr Pro Leu Lys	
260	265	270
Val Ala Asn Ser Pro Thr Met Val Asn Leu Leu	Gly Lys Gly Thr	
275	280	285
Tyr Thr Ser Ser Glu Glu Ser Ser Thr Glu Ser	Ser Glu Glu Glu Asp	
290	295	300
Ala Pro Ser Phe Ala Pro Ser Ser Val Asp Gly	Asn Asn Thr Asp	
305	310	315
Ser Glu Phe Glu Lys Gly Leu Lys His Lys Ala	Lys Asn Pro Glu Pro	
325	330	335
Gln Lys Ala Thr Ala Pro Val Lys Asp Glu Tyr	Phe Asp Glu Asp	
340	345	350
Asp Glu Gln Asp Arg Val Pro Pro Val Asp Asp	Lys His Leu Leu Lys	
355	360	365
Lys Asp Tyr Arg Lys Glu Thr Lys Ser Asn Ser	Phe Ile Ser Ile Pro	
370	375	380
Lys Met Glu Val Lys Ser Tyr Thr Lys Asn Asn	Thr Ile Ala Pro Lys	
385	390	395
400		
Lys Ala Ser His Arg Ile Leu Ser Asp Thr Ser	Asp Glu Ala	
405	410	415
Ser Val Thr Val Gly Thr Gly Glu Lys Leu Arg	Leu Ser Ala His Thr	
420	425	430
Ile Leu Pro Gly Ser Lys Thr Arg Glu Pro Ser	Asn Ala Lys Gln Gln	
435	440	445
Lys Glu Lys Asn Lys Val Lys Lys Lys Arg Lys	Glu Thr Lys Gly	
450	455	460
Arg Glu Val Arg Phe Gly Lys Arg Ser Xaa	Ser Ala Pro Arg Ser	
465	470	475
480		
Arg Arg Ala Ser Pro Gln Arg Val Gly Arg Met	Thr Gly Thr Leu Trp	
485	490	495
Gly Ala Leu Ala Ala Ser Arg Gly Pro Arg Trp Cys		
500	505	

&lt;210&gt; 6151

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6151

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240

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 480  
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<210> 6152  
<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 6152  
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 20               25               30  
 Glu Arg Val Ala Phe Ser Leu Phe Thr His Thr Cys Thr Gln Pro Leu  
 35               40               45  
 Ala Gly Thr Val Asp Thr His Leu Pro Ser Leu Leu Leu Pro Val Ile  
 50               55               60  
 Leu His Pro Leu Gly Ala Ala Ser Ala Gly Arg Ala Leu Glu Pro Lys  
 65               70               75               80  
 Ala Asp Pro His Thr Cys Pro Tyr Gly Arg Lys Glu Ser Arg Gly Glu  
 85               90               95  
 Lys Val Arg Arg Gly Arg Ala Lys Ser Asn Ser Gly Pro Asn Val Pro  
 100              105              110  
 Gly Pro Pro Ala Ala Pro Gln Ser Leu Lys Ser Gly Ser Pro Ser Thr  
 115              120              125  
 Arg Arg  
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<210> 6153  
<211> 1810  
<212> DNA  
<213> Homo sapiens

<400> 6153  
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cgtgcacaca cagccacagt gaggagtgtc cacttctgca gtgatggcca gtccttcgtg  
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540 acgtgcattt ccgctgcgg catggacaac acagtgaagg tgtggacgt gcggactcac  
600 cggctgctgc agcattatca gttgcacagt gcagcagtga acgggctctc tttccacccg  
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<210> 6154  
<211> 388  
<212> PRT  
<213> Homo sapiens

<400> 6154  
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Ser Gly Xaa Met Asp Ser Cys Leu Met Val Trp His Met Lys Leu Gln  
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Ser Arg Ala Tyr Arg Phe Thr Gly His Lys Asp Ala Val Thr Cys Val  
35 40 45  
Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys  
50 55 60  
Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe  
65 70 75 80  
Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly  
85 90 95  
Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala  
100 105 110  
Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp  
115 120 125  
Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala  
130 135 140  
Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys  
145 150 155 160  
Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe  
165 170 175  
His Pro Ser Gly Thr Cys Ile Ala Ala Gly Met Asp Asn Thr Val  
180 185 190  
Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu  
195 200 205  
His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr  
210 215 220  
Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met  
225 230 235 240  
Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr  
245 250 255  
Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser  
260 265 270  
Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His  
275 280 285  
Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser  
290 295 300  
Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly  
305 310 315 320  
Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val  
325 330 335  
Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp  
340 345 350  
Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr  
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370 Arg Ala Thr Pro  
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375

380

<210> 6155  
<211> 995  
<212> DNA  
<213> Homo sapiens

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180 tattccccctt ttctttatcc ttgggaggtt cctattgttg tgccaggtcg ttttcactga  
240 acgattttta aaggtattca ccagccccac gtgtgaccgg ttgcattttt actgtgcagg  
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600 gctgttattt ctttacagaa gatcattgaa attcaaaaac tgctggtagt cctatgaaag  
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840 atggacttga aagggcatta aagattcctt aaacgttaacc gctgtgattt tagagttaca  
900 gtaaaccacg atttggaaagaa actgcttcca gcatgtttt aatatgtgg gtgaccac  
960 ccttagacacc aagtttgaac tagaaacatt cagta  
995

<210> 6156  
<211> 164  
<212> PRT  
<213> Homo sapiens

<400> 6156  
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		35		40							45				
Met	Thr	Leu	Ala	Asp	Gly	Arg	Val	Val	Leu	Ala	Leu	Glu	Gly	Gly	His
		50			55					60					
Asp	Leu	Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val	Asn	Ala	Leu
		65			70			75				80			
Leu	Gly	Asn	Glu	Leu	Glu	Pro	Leu	Ala	Glu	Asp	Ile	Leu	His	Gln	Ser
		85				90					95				
Pro	Asn	Met	Asn	Ala	Val	Ile	Ser	Leu	Gln	Lys	Ile	Ile	Glu	Ile	Gln
												100	105		110
Lys	Leu	Leu	Val	Ser	Leu	Trp	Lys	Arg	Ser	Gln	Pro	Cys	Glu	Val	Pro
												115	120		125
Ser	Pro	Pro	Leu	Ile	Phe	Pro	Val	Cys	Asp	Ile	Ile	Val	Tyr	Pro	Pro
												130	135		140
Thr	Pro	Val	Pro	Ser	Asp	Met	Ser	Cys	Leu	Leu	Pro	Gly	Trp	His	Arg
												145	150		155
Phe	Asn	Gly	Thr												160

<210> 6157  
<211> 2135  
<212> DNA  
<213> Homo sapiens

<400> 6157  
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780  
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840  
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atcgacgtca atgagatctc acgccacctg ggcaagatgt atagttagat gatcttcgtc  
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2135

<210> 6158  
<211> 455  
<212> PRT  
<213> Homo sapiens

<400> 6158  
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Ile Ser Tyr Asp Tyr Leu Thr Ser Leu Lys Ser Val Pro	Tyr Gly Ser	
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Glu Glu Tyr Leu Gln Leu Arg Ser Lys Ile His Asp Leu	Phe Gln Ser	
65	70	75
Phe Asp Asp Thr Pro Leu Gly Thr Ala Ser Leu Ala Gln	Val His Lys	
85	90	95
Ala Val Leu His Asp Gly Arg Thr Val Ala Val Lys Val	Gln His Pro	
100	105	110
Lys Val Arg Ala Gln Ser Ser Lys Asp Ile Leu Leu Met	Glu Val Leu	
115	120	125
Val Leu Ala Val Lys Gln Leu Phe Pro Glu Phe Met Trp	Leu	
130	135	140
Val Asp Glu Ala Lys Lys Asn Leu Pro Leu Glu Leu Asp	Phe Leu Asn	
145	150	155
Glu Gly Arg Asn Ala Glu Lys Val Ser Gln Met Leu Arg	His Phe Asp	
165	170	175
Phe Leu Lys Val Pro Arg Ile His Trp Asp Leu Ser Thr	Glu Arg Val	
180	185	190
Leu Leu Met Glu Phe Val Asp Gly Gly Gln Val Asn Asp	Arg Asp Tyr	
195	200	205
Met Glu Arg Asn Lys Ile Asp Val Asn Glu Ile Ser Arg	His Leu Gly	
210	215	220
Lys Met Tyr Ser Glu Met Ile Phe Val Asn Gly Phe Val	His Cys Asp	
225	230	235
Pro His Pro Gly Asn Val Leu Val Arg Lys His Pro Gly	Thr Gly Lys	
245	250	255
Ala Glu Ile Val Leu Leu Asp His Gly Leu Tyr Gln Met	Leu Thr Glu	
260	265	270
Glu Phe Arg Leu Asn Tyr Cys His Leu Trp Gln Ser Leu	Ile Trp Thr	
275	280	285
Asp Met Lys Arg Val Lys Glu Tyr Ser Gln Arg Leu Gly	Ala Asp	
290	295	300
Leu Tyr Pro Leu Phe Ala Cys Met Leu Thr Ala Arg Ser	Trp Asp Ser	
305	310	315
Val Asn Arg Gly Ile Ser Gln Ala Pro Val Thr Ala Thr	Glu Asp Leu	
325	330	335
Glu Ile Arg Asn Asn Ala Ala Asn Tyr Leu Pro Gln Ile	Ser His Leu	
340	345	350
Leu Asn His Val Pro Arg Gln Met Leu Leu Ile Leu Lys	Thr Asn Asp	
355	360	365
Leu Leu Arg Gly Ile Glu Ala Ala Leu Gly Thr Arg Ala	Ser Ala Ser	
370	375	380
Ser Phe Leu Asn Met Ser Arg Cys Cys Ile Arg Ala Leu	Ala Glu His	
385	390	395
Lys Lys Lys Asn Thr Cys Ser Phe Phe Arg Arg Thr Gln	Ile Ser Phe	
405	410	415
Ser Glu Ala Phe Asn Leu Trp Gln Ile Asn Leu His Glu	Leu Ile Leu	
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Trp Leu Phe Pro Ala Pro Leu		

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455

<210> 6159  
<211> 4310  
<212> DNA  
<213> Homo sapiens

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420  
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480  
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2220  
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3000

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<210> 6160  
 <211> 551  
 <212> PRT  
 <213> Homo sapiens

<400> 6160  
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 His Glu Asp Val Cys Val Phe Lys Cys Ser Val Ser Arg Glu Thr Glu

Cys	Ser	Arg	Val	Gly	Lys	Gln	Ser	Phe	Ile	Ile	Thr	Leu	Gly	Cys	Asn
20							25					30			
35							40					45			
Ser	Val	Leu	Ile	Gln	Phe	Ala	Thr	Pro	Asn	Asp	Phe	Cys	Ser	Phe	Tyr
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Asn	Ile	Leu	Lys	Thr	Cys	Arg	Gly	His	Thr	Leu	Glu	Arg	Ser	Val	Phe
65							70					75			80
Ser	Glu	Arg	Thr	Glu	Glu	Ser	Ser	Ala	Val	Gln	Tyr	Phe	Gln	Phe	Tyr
85							90					95			
Gly	Tyr	Leu	Ser	Gln	Gln	Gln	Asn	Met	Met	Gln	Asp	Tyr	Val	Arg	Thr
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Gly	Thr	Tyr	Gln	Arg	Ala	Ile	Leu	Gln	Asn	His	Thr	Asp	Phe	Lys	Asp
115							120					125			
Lys	Ile	Val	Leu	Asp	Val	Gly	Cys	Gly	Ile	Leu	Ser	Phe	Phe		
130							135					140			
Ala	Ala	Gln	Ala	Gly	Ala	Arg	Lys	Ile	Tyr	Ala	Val	Glu	Ala	Ser	Thr
145							150					155			160
Met	Ala	Gln	His	Ala	Glu	Val	Leu	Val	Lys	Ser	Asn	Asn	Leu	Thr	Asp
165							170					175			
Arg	Ile	Val	Val	Ile	Pro	Gly	Lys	Val	Glu	Glu	Val	Ser	Leu	Pro	Glu
180							185					190			
Gln	Val	Asp	Ile	Ile	Ile	Ser	Glu	Pro	Met	Gly	Tyr	Met	Leu	Phe	Asn
195							200					205			
Glu	Arg	Met	Leu	Glu	Ser	Tyr	Leu	His	Ala	Lys	Lys	Tyr	Leu	Lys	Pro
210							215					220			
Ser	Gly	Asn	Met	Phe	Pro	Thr	Ile	Gly	Asp	Val	His	Leu	Ala	Pro	Phe
225							230					235			240
Thr	Asp	Glu	Gln	Leu	Tyr	Met	Glu	Gln	Phe	Thr	Lys	Ala	Asn	Phe	Trp
245							250					255			
Tyr	Gln	Pro	Ser	Phe	His	Gly	Val	Asp	Leu	Ser	Ala	Leu	Arg	Gly	Ala
260							265					270			
Ala	Val	Asp	Glu	Tyr	Phe	Arg	Gln	Pro	Val	Val	Asp	Thr	Phe	Asp	Ile
275							280					285			
Arg	Ile	Leu	Met	Ala	Lys	Ser	Val	Lys	Tyr	Thr	Val	Asn	Phe	Leu	Glu
290							295					300			
Ala	Lys	Glu	Gly	Asp	Leu	His	Arg	Ile	Glu	Ile	Pro	Phe	Lys	Phe	His
305							310					315			320
Met	Leu	His	Ser	Gly	Leu	Val	His	Gly	Leu	Ala	Phe	Trp	Phe	Asp	Val
325							330					335			
Ala	Phe	Ile	Gly	Ser	Ile	Met	Thr	Val	Trp	Leu	Ser	Thr	Ala	Pro	Thr
340							345					350			
Glu	Pro	Leu	Thr	His	Trp	Tyr	Gln	Val	Arg	Cys	Leu	Phe	Gln	Ser	Pro
355							360					365			
Leu	Phe	Ala	Lys	Ala	Gly	Asp	Thr	Leu	Ser	Gly	Thr	Cys	Leu	Leu	Ile
370							375					380			
Ala	Asn	Lys	Arg	Gln	Ser	Tyr	Asp	Ile	Ser	Ile	Val	Ala	Gln	Val	Asp
385							390					395			400
Gln	Thr	Gly	Ser	Lys	Ser	Ser	Asn	Leu	Leu	Asp	Leu	Lys	Asn	Pro	Phe
405							410					415			
Phe	Arg	Tyr	Thr	Gly	Thr	Thr	Pro	Ser	Pro	Pro	Pro	Gly	Ser	His	Tyr
420							425					430			
Thr	Ser	Pro	Ser	Glu	Asn	Met	Trp	Asn	Thr	Gly	Ser	Thr	Tyr	Asn	Leu
435							440					445			
Ser	Ser	Gly	Met	Ala	Val	Ala	Gly	Met	Pro	Thr	Ala	Tyr	Asp	Leu	Ser

450                    455                    460  
Ser Val Ile Ala Ser Gly Ser Ser Val Gly His Asn Asn Leu Ile Pro  
465                    470                    475                    480  
Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser  
485                    490                    495  
Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser  
500                    505                    510  
Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr  
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<210> 6161  
<211> 1489  
<212> DNA  
<213> Homo sapiens

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1020

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 1489

&lt;210&gt; 6162

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6162  
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 Glu Arg Lys Glu Asp Gly Gly Asn Gly Lys Lys Arg Ser Thr Leu Leu  
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 Arg Lys Gly Thr Glu Pro Gly Val Val Ala His Ala Cys Asn Pro Xaa  
 35 40 45  
 Thr Leu Gly Gly Arg Ser Lys Glu Ile Thr  
 50 55

&lt;210&gt; 6163

&lt;211&gt; 713

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 6164  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 6164  
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 Pro Leu Pro Gly Lys Ala Gly Leu Ala Leu Leu Lys Pro Gln Ser Arg  
 35 40 45  
 Ser Asp Gly Tyr Arg Tyr Leu Gly Lys Asp Thr Val Asp Gly Leu Asp  
 50 55 60  
 Ser Ser Leu Leu Lys Cys Thr Arg Arg Cys Met Arg Gly Phe Arg Leu  
 65 70 75 80  
 Pro Glu Lys Gln Pro Ser Lys Thr Arg Val Ser Phe Leu Glu Ser Lys  
 85 90 95  
 Arg Lys Glu Gly Ser Gly Trp Leu His Trp Ser Val Thr Arg Ser Gly  
 100 105 110  
 Ala Phe Arg Leu Lys Val Thr Val  
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<210> 6165  
 <211> 1004  
 <212> DNA  
 <213> Homo sapiens

<400> 6165  
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 180  
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 240  
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 420  
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 720  
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 780  
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 900  
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 1004

<210> 6166  
<211> 239  
<212> PRT  
<213> Homo sapiens

<400> 6166  
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 35 40 45  
 Glu Met Leu Ser Lys Lys Gln Glu Phe Leu Glu Lys Ile Glu Gln  
 50 55 60  
 Glu Leu Thr Ala Ala Lys Lys His Gly Thr Lys Asn Lys Arg Ala Ala  
 65 70 75 80  
 Leu Gln Ala Leu Lys Arg Lys Arg Tyr Glu Lys Gln Leu Ala Gln  
 85 90 95  
 Ile Asp Gly Thr Leu Ser Thr Ile Glu Phe Gln Arg Glu Ala Leu Glu  
 100 105 110  
 Asn Ala Asn Thr Asn Thr Glu Val Leu Lys Asn Met Gly Tyr Ala Ala  
 115 120 125  
 Lys Ala Met Lys Ala Ala His Asp Asn Met Asp Ile Asp Lys Val Asp  
 130 135 140  
 Glu Leu Met Gln Asp Ile Ala Asp Gln Gln Glu Leu Ala Glu Glu Ile  
 145 150 155 160  
 Ser Thr Ala Ile Ser Lys Pro Val Gly Phe Gly Glu Glu Phe Asp Glu  
 165 170 175  
 Asp Glu Leu Met Ala Glu Leu Glu Leu Glu Gln Glu Leu Asp  
 180 185 190  
 Lys Asn Leu Leu Glu Ile Ser Gly Pro Glu Thr Val Pro Leu Pro Asn  
 195 200 205  
 Val Pro Ser Ile Ala Leu Pro Ser Lys Pro Ala Lys Lys Lys Glu Glu  
 210 215 220  
 Glu Asp Asp Asp Met Lys Glu Leu Glu Asn Trp Ala Gly Ser Met

225

230

235

<210> 6167  
<211> 1220  
<212> DNA  
<213> Homo sapiens

<400> 6167  
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120  
tcaaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc ttttatgt  
180  
cctccacttc cccagtgcct tctctctcc cgggtctgcg cggacgeggc ctcttacct  
240  
catttgccct cgcgcctccc cgtccctcta cgcgtttgg tccctgtttg tgcgttctg  
300  
tttgtagctc cggcagttag tatgtatgtg acggaccccg agtcacccgc ggcctggac  
360  
ccctgcctac ctcccgctc gccagccgag ctgtggaact agcgcgtgcc ccctcgccga  
420  
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480  
gcgcgcgcgc ccacgcggcc gggctgcggg tctagggggc cgcacatctcc ctggcttcc  
540  
aagggtcaag gtcgtgattc tagggcggct gggcgccag ggcctcggt ggggtggcgt  
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660  
cgccggaggc cgggcgcgc gagagagagt ccagtcttg aggaccgagt agtcctggc  
720  
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900  
ctctgagcct ctatctgcat taccattcac tggcagcag tctttgagc caagtggcaa  
960  
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atagaacagc tcaatcgtg tttgatccaa cacttccatc tcattaagac aagtttgatt  
1080  
tttctttgtt ttttatttca tggaatacat gagaatctt taactgttgg agtttccaag  
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1200  
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1220

<210> 6168  
<211> 90  
<212> PRT

<213> Homo sapiens

<400> 6168

Ala	Lys	Trp	Gln	Ile	Trp	Thr	Val	Ser	Ile	Asp	Ala	Asp	Glu	Pro	His
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Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
					20		25			30					
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
						35		40			45				
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
						50		55			60				
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
	65				70			75			80				
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
					85			90							

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120					
cagtgacccc	aggctttta	tggctgtgaa	acacgttaaa	atttcagggt	aagacgtgac
180					
cttttgaggt	gactataact	gaagattgct	ttacagaagc	ccaaaaaggt	tttttgagtc
240					
atgatgcaag	aatctggac	tgagacaaaa	agtaacggtt	cagccatcca	aatgggtcg
300					
ggcggcagca	accacttact	agagtgcggc	ggtcttcggg	agggggcggtc	caacggagag
360					
acgccccccg	tggacatcg	ggcagctgac	ctcgccccacg	cccagcagca	gcagcaacag
420					
tggcatctca	taaaccatca	gccctctagg	agtcccagca	gttggcttaa	gagactaatt
480					
tcaagccctt	gggagttgga	agtccctgcag	gtcccttgc	gggagcagtt	gctgagacga
540					
agatgagtgg	acctgtgtgt	cagcctaacc	cttccccatt	ttgaataaaa	ttattctttg
600					
gagaaatggt	tcccactgct	ttcatgcaaa	aataaaaatt	aaacgaaaaaa	cagcttaagc
660					
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720					

<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

Met	Met	Gln	Glu	Ser	Gly	Thr	Glu	Thr	Lys	Ser	Asn	Gly	Ser	Ala	Ile
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1               5               10               15  
Gln Asn Gly Ser Gly Gly Ser Asn His Leu Leu Glu Cys Gly Gly Leu  
20              25              30  
Arg Glu Gly Arg Ser Asn Gly Glu Thr Pro Ala Val Asp Ile Gly Ala  
35              40              45  
Ala Asp Leu Ala His Ala Gln Gln Gln Gln Gln Trp His Leu Ile  
50              55              60  
Asn His Gln Pro Ser Arg Ser Pro Ser Ser Trp Leu Lys Arg Leu Ile  
65              70              75              80  
Ser Ser Pro Trp Glu Leu Glu Val Leu Gln Val Pro Cys Gly Glu Gln  
85              90              95  
Leu Leu Arg Arg Arg  
100

<210> 6171  
<211> 1130  
<212> DNA  
<213> Homo sapiens

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120  
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc  
180  
cgggacacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacgg  
240  
tcagaagcca agtatcttca agaccttctc atggagagtg tgaatttttc ccccgccaat  
300  
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420  
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480  
ttaactgcaa cttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg  
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600  
gcaaaatgcag aggaatttcag atttggaaatc aaggctgcag aggagcaact ttcagccaga  
660  
ggcatggatg cttctctgtc tcatacgtcc ttagtagcac tatcagagaa actggcaaga  
720  
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780  
aatccgtctc ttgctcaagt gaaaattgaa gaagcaaagc gagaactaga tagcattgaa  
840  
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900  
tttccctaaac aaagtaaattt gaataggact ttacagagtt ctttttcctc ttggcatttc  
960  
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatgg  
1020

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1080  
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1130

<210> 6172  
<211> 292  
<212> PRT  
<213> Homo sapiens

<400> 6172  
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Pro Gln Glu Glu Arg Glu Thr Gln Val Ala Ala Trp Leu Lys Lys Ile  
20 25 30  
Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr  
35 40 45  
Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp  
50 55 60  
Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu  
65 70 75 80  
Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe  
85 90 95  
Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu  
100 105 110  
Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser  
115 120 125  
Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys  
130 135 140  
Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn  
145 150 155 160  
Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys  
165 170 175  
Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg  
180 185 190  
Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe  
195 200 205  
Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala  
210 215 220  
Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg  
225 230 235 240  
Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu  
245 250 255  
Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala  
260 265 270  
Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp  
275 280 285  
Met Met Glu Leu  
290

<210> 6173  
<211> 1483  
<212> DNA  
<213> Homo sapiens

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120  
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc  
180  
aagggtttta tcaccaagca gggctatgcc ttgttggttt cagatctca acaggtgtgg  
240  
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc  
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720  
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780  
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960  
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1260  
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1320  
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1380  
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1440  
aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaat cctcatgccc aat  
1483

&lt;210&gt; 6174

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6174

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 Gln Leu Ala Glu Asn Ser Leu Leu Ala Lys Val Phe Ile Thr Lys Gln  
 20               25               30  
 Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln  
 35               40               45  
 Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg  
 50               55               60  
 Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu  
 65               70               75               80  
 Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser  
 85               90               95  
 Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu  
 100              105              110  
 Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro  
 115              120              125  
 Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu  
 130              135              140  
 Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys  
 145              150              155              160  
 Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg  
 165              170              175  
 Asp Arg Leu Lys Thr Glu Pro Phe Glu Asn Ser Phe Leu Glu Gln  
 180              185              190  
 Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys  
 195              200              205  
 Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln  
 210              215              220  
 Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr  
 225              230              235              240  
 Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln  
 245              250              255  
 Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys  
 260              265              270  
 Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys  
 275              280              285  
 Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser  
 290              295

&lt;210&gt; 6175

&lt;211&gt; 349

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6175

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 aggactggga ttcaaataat gcgtgcattt gagaatgact tttcaattc tcccccaaga  
 120

aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaagggtgaa  
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 240  
 tggttgaata gaagtcaaac agtagtgaa gagtatttg cttttcttgg taatcttga  
 300  
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 349

<210> 6176  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 6176  
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 Gly Glu Thr Asn Asp Phe Glu Leu Leu Lys Asn Gln Leu Leu Asp Pro  
 35 40 45  
 Asp Ile Lys Arg Leu Pro Trp Leu Asn Arg Ser Gln Thr Val Val Glu  
 50 55 60  
 Glu Tyr Leu Ala Phe Leu Gly Asn Leu Val Ser Ala Gln Thr Val Phe  
 65 70 75 80  
 Leu Arg Pro Cys Leu Ser Met Ile Ala Ser  
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<210> 6177  
<211> 1536  
<212> DNA  
<213> Homo sapiens

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 120  
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 240  
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 360  
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gccccctacga cagtggacag aaccacgccc ctgatgaaga agattgganc agtgccccat  
660  
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720  
cgaggcctgg cggctagtgg aggaaggaat ncgtgtctcc tagtgcaccc gnnacccgtc  
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840  
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960  
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gagtgcctca tgagactcgc caagttgaag agtcaagtgc agcccccagtg aatttcttgt  
1080  
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1140  
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1200  
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1320  
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<210> 6178  
<211> 310  
<212> PRT  
<213> Homo sapiens

<400> 6178  
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Arg Asn Ala Leu Glu Asn Ile Arg Lys Glu Met Lys Leu Leu Glu Gln  
35 40 45  
Ala Gly Ser Leu Lys Gly Ser Leu Ser Val Glu Glu Gln Leu Ser Leu  
50 55 60  
Ile Ser Gly Cys Pro Asn Ile Gln Glu Ala Val Glu Gly Ala Met His  
65 70 75 80  
Ile Gln Glu Cys Val Pro Glu Asp Leu Glu Leu Lys Lys Ile Phe  
85 90 95  
Ala Gln Leu Asp Ser Ile Ile Asp Asp Arg Val Ile Leu Ser Ser Ser  
100 105 110  
Thr Ser Cys Leu Met Pro Ser Lys Leu Phe Ala Gly Leu Val His Val

115	120	125
Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro Tyr Tyr Ile Pro		
130	135	140
Leu Val Glu Leu Val Pro His Pro Glu Thr Ala Pro Thr Thr Val Asp		
145	150	155
Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser		
165	170	175
Pro Glu Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn		
180	185	190
His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu		
195	200	205
Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala		
210	215	220
Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu		
225	230	235
Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr		
245	250	255
Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn		
260	265	270
Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala		
275	280	285
Arg Arg Gln Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys		
290	295	300
Ser Gln Val Gln Pro Gln		
305	310	

&lt;210&gt; 6179

&lt;211&gt; 2940

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6179

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660

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 <212> PRT  
 <213> Homo sapiens

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 Tyr Leu Leu Ile Thr Val Gly Val Val Tyr Val Lys Ser Phe Pro Gln  
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 Ser Arg Lys Asp Ile Leu Lys Asp Leu Val Glu Met Cys Arg Gly Val  
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 Gln His Pro Leu Arg Gly Leu Phe Leu Arg Asn Tyr Leu Leu Gln Cys  
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 Thr Arg Asn Ile Leu Pro Asp Glu Gly Glu Pro Thr Asp Glu Glu Thr  
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 Thr Gly Asp Ile Ser Asp Ser Met Asp Phe Val Leu Leu Asn Phe Ala  
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 Asp Arg Glu Lys Arg Glu Arg Glu Arg Gln Glu Leu Arg Ile Leu Val  
 165 170 175  
 Gly Thr Asn Leu Val Arg Leu Ser Xaa Ser Trp Arg Cys Lys Cys Gly  
 180 185 190  
 Thr Leu Gln Gln Ile Val Leu Thr Gly Ile Leu Glu Gln Val Val Asn

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Ala Cys Ala Glu Leu His Gln Asn Val Asn Val Lys Asn Ile Ile Ile		240
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Ala Leu Ile Asp Arg Leu Ala Leu Phe Ala His Arg Glu Asp Gly Pro		
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Gly Ile Pro Ala Asp Ile Lys Leu Phe Asp Ile Phe Ser Gln Gln Val		
275	280	285
Ala Thr Val Ile Gln Ser Arg Gln Asp Met Pro Ser Glu Asp Val Val		
290	295	300
Ser Leu Gln Val Ser Leu Ile Asn Leu Ala Met Lys Cys Tyr Pro Asp		
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Arg Val Asp Tyr Val Asp Lys Val Leu Glu Thr Thr Val Glu Ile Phe		320
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Asn Lys Leu Asn Leu Glu His Ile Ala Thr Ser Ser Ala Val Ser Lys		
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Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp Thr Tyr Asn Asn Ile		
355	360	365
Leu Thr Val Leu Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe		
370	375	380
Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val		
385	390	395
Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile		400
405	410	415
Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val		
420	425	430
Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu Gln Ser Leu Val Gly		
435	440	445
Arg Phe Ile His Leu Leu Arg Ser Glu Asp Pro Asp Gln Gln Tyr Leu		
450	455	460
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465	470	475
Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala Ala Tyr Gln Leu Ala		480
485	490	495
Phe Arg Tyr Lys Glu Asn Ser Lys Trp Met Thr Asn Gly Lys Arg Asn		
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515	520	525
Lys Ala Glu Leu Ala Glu Leu Pro Leu Arg Leu Phe Leu Gln Gly Ala		
530	535	540
Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His Glu Thr Val Ala Tyr		
545	550	555
Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu Asp Glu Ile Ser Asp		560
565	570	575
Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile Ile Gly Thr Phe Glu		
580	585	590
Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln		
595	600	605
Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg		
610	615	620
Ala Glu His Leu Cys Thr Ser Leu Trp Ser Gly Arg Asn Thr Asp Lys		

625	630	635	640
Asn	Gly	Glu	Glu
Glu	Glu	Leu	His
Lys	Gly	Gly	Lys
Arg	Val	Met	Glu
Cys	Leu	Lys	
645		650	655
Lys	Ala	Leu	Lys
Ile	Ala	Asn	Gln
Cys	Met	Asp	Pro
660	665	670	
Gln	Leu	Phe	Ile
Leu	Asn	Ile	Ile
Arg	Tyr	Ile	Tyr
675	680	685	
Glu	Asn	Asp	Ala
Asp	Ala	Val	Thr
Ile	Gln	Val	Leu
Asn	Leu	Asn	Ile
Gln	Ile	Gln	Lys
690	695	700	
Ile	Arg	Glu	Asp
Arg	Glu	Asp	Leu
Asp	Leu	Pro	Asn
705	710	715	720
Ile	Asn	Lys	His
His	Asn	Thr	Leu
Phe	Ile	Glu	His
725	730	735	
Glu	Ser	Pro	Glu
740	745	750	
Ser	Glu	Gly	Pro
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			Leu

&lt;210&gt; 6181

&lt;211&gt; 1135

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6181

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 <211> 236  
 <212> PRT  
 <213> Homo sapiens

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 Glu Val Phe Phe Leu Pro Asp Leu Pro Thr Thr Pro Tyr Phe Ser Arg  
 35 40 45  
 Asp Ala Gln Lys His Asp Val Glu Val Leu Glu Arg Asn Phe Gln Thr  
 50 55 60  
 Ile Leu Cys Glu Phe Glu Thr Leu Tyr Lys Ala Phe Ser Asn Cys Ser  
 65 70 75 80  
 Leu Pro Gln Gly Trp Lys Met Asn Ser Thr Pro Ser Gly Glu Trp Phe  
 85 90 95  
 Thr Phe Tyr Leu Val Asn Gln Gly Val Cys Val Pro Arg Asn Cys Arg  
 100 105 110  
 Lys Cys Pro Arg Thr Tyr Arg Leu Leu Gly Ser Leu Arg Thr Cys Ile  
 115 120 125  
 Gly Asn Asn Val Phe Gly Asn Ala Cys Ile Ser Val Leu Ser Pro Gly  
 130 135 140  
 Thr Val Ile Thr Glu His Tyr Gly Pro Thr Asn Ile Arg Ile Arg Cys  
 145 150 155 160  
 His Leu Gly Leu Lys Thr Pro Asn Gly Cys Glu Leu Val Val Gly Gly  
 165 170 175  
 Glu Pro Gln Cys Trp Ala Glu Gly Arg Cys Leu Leu Phe Asp Asp Ser  
 180 185 190  
 Phe Leu His Ala Ala Phe His Glu Gly Ser Ala Glu Asp Gly Pro Arg  
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 Arg Gln Ala Leu Asp Phe Ile Phe Ala Pro Gly Arg  
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<210> 6183  
 <211> 2530  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

<400> 6184  
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 35 40 45  
 Arg Gly  
 50 55 60  
 Ala Arg Gly Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys  
 65 70 75 80  
 Leu Gly Arg Leu Val Lys Asp Met Lys Ile Lys Ser Leu Glu Glu Ile  
 85 90 95  
 Tyr Leu Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Phe Phe  
 100 105 110  
 Leu Gly Ala Ser Leu Lys Asp Glu Val Leu Lys Ile Met Pro Val Gln  
 115 120 125  
 Lys Gln Thr Arg Ala Gly Gln Arg Thr Arg Phe Lys Ala Phe Val Ala  
 130 135 140  
 Ile Gly Asp Tyr Asn Gly His Val Gly Leu Gly Val Lys Cys Ser Lys

145	150	155	160
Glu Val Ala Thr Ala Ile Arg Gly Ala Ile Ile Leu Ala Lys Leu Ser			
165	170	175	
Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro			
180	185	190	
His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val			
195	200	205	
Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val			
210	215	220	
Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser			
225	230	235	240
Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe			
245	250	255	
Asp Ala ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys			
260	265	270	
Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu			
275	280	285	
Val Lys Thr His Thr Arg Val Ser Val Gln Arg Thr Gln Ala Pro Ala			
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Val Ala Thr Thr			
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<210> 6185  
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<212> DNA  
<213> Homo sapiens

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600	
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660	
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720	
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 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 6186  
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   20               25                           30  
 Gly Tyr Ile Cys Arg Ile Cys His Lys Phe Tyr His Ser Asn Ser Gly  
   35               40                           45  
 Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln  
   50               55                           60  
 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser  
   65               70                           75                   80  
 Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr  
   85               90                           95  
 Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro  
   100              105                          110  
 Ser Lys Val Thr Ala Arg Pro Ser Gln Pro Pro Leu Pro Arg Arg Ser  
   115              120                          125  
 Thr Arg Leu Lys Thr  
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<210> 6187  
 <211> 909  
 <212> DNA  
 <213> Homo sapiens

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 gtcacagcag cactgttact gggtctcatg atgggtggca ctggagacga ggatgagaac  
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agccccgtgtg cccatgaggc cctctggac gaggacaccc tcttttgcga gggccttgaa  
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 420  
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 Phe Pro Gly Ala Val Tyr Gly Ala Thr Tyr Ile Leu Val Met Val Asp  
 85 90 95  
 Pro Asp Ala Pro Ser Arg Ala Glu Pro Arg Gln Arg Phe Trp Arg His  
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 Gln Gly Gln Glu Leu Ser Ala Tyr Gln Ala Pro Ser Pro Pro Ala His  
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 Ser Gly Phe His Arg Tyr Gln Phe Phe Val Tyr Leu Gln Glu Gly Lys  
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 Val Ile Ser Leu Leu Pro Lys Glu Asn Lys Thr Arg Gly Ser Trp Lys

165                    170                    175  
Met Asp Arg Phe Leu Asn Arg Phe His Leu Gly Glu Pro Glu Ala Ser  
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Thr Gln Phe Met Thr Gln Asn Tyr Gln Asp Ser Pro Thr Leu Gln Ala  
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Pro Leu Ala Ala Gly Thr Trp Arg Ser Ala Pro Val Pro Val Thr Thr  
65 70 75 80  
Gln Asn Pro Pro Gly Ala Pro Pro Asn Val Leu Trp Gln Thr Pro Leu  
85 90 95  
Ala Trp Gln Asn Pro Ser Gly Trp Gln Asn Gln Thr Ala Arg Gln Thr  
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115 120 125  
Gln Thr Gln Asn Pro Val Ala Trp Gln Asn Pro Val Ile Trp Pro Asn  
130 135 140  
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180 185 190  
Pro Pro Asp Trp Gln Gly Pro Pro Asp Trp Pro Leu Pro Pro Asp Trp  
195 200 205  
Pro Leu Pro Pro Asp Trp Pro Leu Pro Thr Asp Trp Pro Leu Pro Pro  
210 215 220  
Asp Trp Ile Pro Ala Asp Trp Pro Ile Pro Pro Asp Trp Gln Asn Leu  
225 230 235 240  
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245 250 255  
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260 265 270  
Ala Asn Lys Leu Val Lys Tyr Leu Met Leu Lys Asp Tyr Thr Lys Val  
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290 295 300  
Asp Val Tyr Pro Glu Ile Ile Glu Arg Ala Cys Phe Val Leu Glu Lys  
305 310 315 320  
Lys Phe Gly Ile Gln Leu Lys Glu Ile Asp Lys Glu Glu His Leu Tyr  
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340 345 350  
Lys Asp Thr Pro Lys Leu Gly Leu Leu Val Ile Leu Gly Val Ile

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Leu Arg Lys Leu Leu Thr Tyr Glu Phe Val Lys Gln Lys Tyr Leu Asp		
405	410	415
Tyr Arg Arg Val Pro Asn Ser Asn Pro Pro Glu Tyr Glu Phe Leu Trp		
420	425	430
Gly Leu Arg Ser Tyr His Glu Thr Ser Lys Met Lys Val Leu Arg Phe		
435	440	445
Ile Ala Glu Val Gln Lys Arg Asp Pro Arg Asp Trp Thr Ala Gln Phe		
450	455	460
Met Glu Ala Ala Asp Glu Ala Leu Asp Ala Leu Asp Ala Ala Ala		
465	470	475
Glu Ala Glu Ala Arg Ala Glu Ala Arg Thr Arg Met Gly Ile Gly Asp		
485	490	495
Glu Ala Val Ser Gly Pro Trp Ser Trp Asp Asp Ile Glu Phe Glu Leu		
500	505	510
Leu Thr Trp Asp Glu Glu Gly Asp Phe Gly Asp Pro Trp Ser Arg Ile		
515	520	525
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Pro Gln Thr Phe Ala Gly Pro Ile Ile Gly Pro Gly Gly Thr Ala Ser		
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 35 40 45  
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 Gly Ser Ala Asn Val Val Thr Glu Ala Leu Gln Arg Phe Thr Arg Ala  
 65 70 75 80  
 Ala Ala Asp Phe Ala Thr His Gly Lys Leu Gly Lys Leu Glu Phe Ala  
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 Gln Asp Ala His Gly Gln Pro Asp Val Ser Ala Phe Asp Phe Thr Ser  
 100 105 110  
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 115 120 125  
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 Pro Leu Gly Thr Gly Val Ala Arg Gly Phe Leu Ala Ala Phe Asp Ala

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 Arg Tyr Pro Asn Leu Asn Leu Arg Ala Val Thr Pro Asn Gln Val Arg  
       210                    215                    220  
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 Lys Thr Asp Thr Gly Met Pro Ala Thr Gly Ser Ala Gly Thr Gln Glu  
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 Glu Leu Leu Arg Trp Cys Gln Glu Gln Thr Ala Gly Tyr Pro Gly Val  
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 His Val Ser Asp Leu Ser Ser Trp Ala Asp Gly Leu Ala Leu Cys  
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 Ala Leu Val Tyr Arg Leu Gln Pro Gly Leu Leu Glu Pro Ser Glu Leu  
       290                    295                    300  
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 Thr Leu Gln Arg Ser Arg Ala Lys Asp Leu Leu Gln Glu Asn Ala Glu  
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 Asp Ala Gly Gly Lys Leu Arg Leu Glu Met Glu Ala Glu Thr Pro  
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 Ser Thr Glu Val Pro Pro Asp Pro Glu Pro Gly Val Pro Leu Thr Pro  
       420                    425                    430  
 Pro Ser Gln His Gln Glu Ala Gly Ala Gly Asp Leu Cys Ala Leu Cys  
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       450                    455                    460  
 Phe His Arg Ser Cys Phe Arg Cys His Thr Cys Glu Ala Thr Leu Trp  
       465                    470                    475                    480  
 Pro Gly Gly Tyr Glu Gln His Pro Gly Asp Gly His Phe Tyr Cys Leu  
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 Gln His Leu Pro Gln Thr Asp His Lys Ala Glu Gly Ser Asp Arg Gly  
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 Pro Glu Ser Pro Glu Leu Pro Thr Pro Ser Glu Asn Ser Met Pro Pro  
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 Gly Leu Ser Thr Pro Thr Ala Ser Gln Glu Gly Ala Gly Pro Val Pro  
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       545                    550                    555                    560  
 Arg Gln Arg Leu Ser Ser Leu Asn Leu Thr Pro Asp Pro Glu Met Glu  
       565                    570                    575  
 Pro Pro Pro Lys Pro Pro Arg Ser Cys Ser Ala Leu Ala Arg His Ala

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Ala Leu Val Ala Met Glu Lys Glu	Glu Lys Ser Pro Phe Ser Ser	
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Glu Glu Glu Glu Asp Val Pro Leu Asp	Ser Asp Val Glu Gln Ala	
625	630	635
Leu Gln Thr Phe Ala Lys Thr Ser Gly	Thr Met Asn Asn Tyr Pro Thr	
645	650	655
Trp Arg Arg Thr Leu Leu Arg Arg Ala	Lys Glu Glu Met Lys Arg	
660	665	670
Phe Cys Lys Ala Gln Thr Ile Gln Arg	Arg Leu Asn Glu Ile Glu Ala	
675	680	685
Ala Leu Arg Glu Leu Glu Ala Glu	Gly Val Lys Leu Glu Leu Ala Leu	
690	695	700
Arg Arg Gln Ser Ser Pro Glu Gln Gln	Lys Lys Leu Trp Val Gly	
705	710	715
Gln Leu Leu Gln Leu Val Asp Lys	Lys Asn Ser Leu Val Ala Glu Glu	
725	730	735
Ala Glu Leu Met Ile Thr Val Gln Glu	Leu Asn Leu Glu Glu Lys Gln	
740	745	750
Trp Gln Leu Asp Gln Glu Leu Arg	Gly Tyr Met Asn Arg Glu Glu Asn	
755	760	765
Leu Lys Thr Ala Ala Asp Arg Gln Ala	Glu Asp Gln Val Leu Arg Lys	
770	775	780
Leu Val Asp Leu Val Asn Gln Arg	Asp Ala Leu Ile Arg Phe Gln Glu	
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Glu Arg Arg Leu Ser Glu Leu Ala Leu	Gly Thr Gly Ala Gln Gly	
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780  
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840  
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1080  
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1380  
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2100  
atgtgc  
2160

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 2700  
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<210> 6194  
 <211> 621  
 <212> PRT  
 <213> Homo sapiens

<400> 6194  
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 35 40 45  
 Ala Glu Val Val Gln Tyr Ala Lys Glu Val Val Asp Phe Ser Ser His  
 50 55 60  
 Tyr Gly Ser Glu Asn Ser Met Ser Tyr Thr Met Trp Asn Leu Ala Gly  
 65 70 75 80  
 Val Pro Asn Val Phe Pro Ser Ser Gly Asp Phe Thr Gln Thr Ala Val  
 85 90 95  
 Phe Arg Thr Tyr Gly Thr Trp Trp Asp Gln Cys Pro Ser Ala Ser Leu  
 100 105 110  
 Pro Phe Lys Arg Thr Pro Pro Asn Phe Gln Ser Gln Asp Tyr Val Glu  
 115 120 125  
 Leu Thr Phe Glu Gln Gln Val Tyr Pro Thr Ala Val His Val Leu Glu  
 130 135 140  
 Thr Tyr His Pro Gly Ala Val Ile Arg Ile Leu Ala Cys Ser Ala Asn  
 145 150 155 160  
 Pro Tyr Ser Pro Asn Pro Ala Glu Val Arg Trp Glu Ile Leu Trp

	165	170	175
Ser	Glu Arg Pro Thr Lys Val Asn Ala Ser Gln Ala Arg Gln Phe Lys		
	180	185	190
Pro	Cys Ile Lys Gln Ile Asn Phe Pro Thr Asn Leu Ile Arg Leu Glu		
	195	200	205
Val	Asn Ser Ser Leu Leu Glu Tyr Tyr Glu Leu Asp Ala Val Val		
	210	215	220
Leu	His Gly Val Lys Asp Lys Pro Val Leu Ser Leu Lys Thr Ser Leu		
	225	230	235
Ile	Asp Met Asn Asp Ile Glu Asp Asp Ala Tyr Ala Glu Lys Asp Gly		
	245	250	255
Cys	Gly Met Asp Ser Leu Asn Lys Lys Phe Ser Ser Ala Val Leu Gly		
	260	265	270
Glu	Gly Pro Asn Asn Gly Tyr Phe Asp Lys Leu Pro Tyr Glu Leu Ile		
	275	280	285
Gln	Leu Ile Leu Asn His Leu Thr Leu Pro Asp Leu Cys Arg Leu Ala		
	290	295	300
Gln	Thr Cys Lys Leu Leu Ser Gln His Cys Cys Asp Pro Leu Gln Tyr		
	305	310	315
Ile	His Leu Asn Leu Gln Pro Tyr Trp Ala Lys Leu Asp Asp Thr Ser		
	325	330	335
Leu	Glu Phe Leu Gln Ser Arg Cys Thr Leu Val Gln Trp Leu Asn Leu		
	340	345	350
Ser	Trp Thr Gly Asn Arg Gly Phe Ile Ser Val Ala Gly Phe Ser Arg		
	355	360	365
Phe	Lys Val Cys Gly Ser Glu Leu Val Arg Leu Glu Leu Ser Cys		
	370	375	380
Ser	His Phe Leu Asn Glu Thr Cys Leu Glu Val Ile Ser Glu Met Cys		
	385	390	395
Pro	Asn Leu Gln Ala Leu Asn Leu Ser Ser Cys Asp Lys Leu Pro Pro		
	405	410	415
Gln	Ala Phe Asn His Ile Ala Lys Leu Cys Ser Leu Lys Arg Leu Val		
	420	425	430
Leu	Tyr Arg Thr Lys Val Glu Gln Thr Ala Leu Leu Ser Ile Leu Asn		
	435	440	445
Phe	Cys Ser Glu Leu Gln His Leu Ser Leu Gly Ser Cys Val Met Ile		
	450	455	460
Glu	Asp Tyr Asp Val Ile Ala Ser Met Ile Gly Ala Lys Cys Lys Lys		
	465	470	475
Leu	Arg Thr Leu Asp Leu Trp Arg Cys Lys Asn Ile Thr Glu Asn Gly		
	485	490	495
Ile	Ala Glu Leu Ala Ser Gly Cys Pro Leu Leu Glu Glu Leu Asp Leu		
	500	505	510
Gly	Trp Cys Pro Thr Leu Gln Ser Ser Thr Gly Cys Phe Thr Arg Leu		
	515	520	525
Ala	His Gln Leu Pro Asn Leu Gln Lys Leu Phe Leu Thr Ala Asn Arg		
	530	535	540
Ser	Val Cys Asp Thr Asp Ile Asp Glu Leu Ala Cys Asn Cys Thr Arg		
	545	550	555
Leu	Gln Gln Leu Asp Ile Leu Gly Thr Arg Met Val Ser Pro Ala Ser		
	565	570	575
Leu	Arg Lys Leu Leu Glu Ser Cys Lys Asp Leu Ser Leu Leu Asp Val		
	580	585	590
Ser	Phe Cys Ser Gln Ile Asp Asn Arg Ala Val Leu Glu Leu Asn Ala		

595	600	605
Ser Phe Pro Lys Val Phe Ile Lys Lys Ser Phe Thr Gln		
610	615	620

<210> 6195  
<211> 518  
<212> DNA  
<213> Homo sapiens

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120  
gtttccactt ctgctgtcaa gaaccacaag ggtcaagccc catccctaca aataccaagt  
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240  
ccccacccca aggcatgtga caacaggac tgctaatgag ctttgtccgg gtaactcatt  
300  
cacgccccatca ttttgctttt tccatagtc cttattaagc acaaactatg ccaaaaacta  
360  
tgtccagcac cgacacaggat ggtaaaatgc cctgaggggc caccccccac tgactccgt  
420  
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518

<210> 6196  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 6196  
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Arg Pro Val Leu Cys Ser Pro Ser Trp Phe Pro Gly Glu Lys Phe Pro  
20 25 30  
Leu Leu Leu Ser Arg Thr Thr Arg Val Lys Pro His Pro Tyr Lys Tyr  
35 40 45  
Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His  
50 55 60  
Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr  
65 70 75 80  
Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser  
85 90 95  
Phe His Ser His Leu Leu Ser Thr Asn Tyr Ala Lys Asn Tyr Val Gln  
100 105 110  
His Arg Thr Gly Trp  
115

<210> 6197  
<211> 2841

<212> DNA  
<213> Homo sapiens

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120  
aataccaggt acagccttc cccgctcatac cagagcagga caaacaggcc aggtggatc  
180  
aggagccag gtctccagct ggagggaatg tcaaccctgc agtggagca ggggcccata  
240  
acgcacatccta ggcacagatg ctaatgcagg cactgcaggt aagctggct tggtatcctt  
300  
ccctggcttc agaaagaagc caacaaggag cgaaaaatgc aatgaaacct ttgtttccag  
360  
aagcactgct gactgttaagt ggttgccgtt tgtggcagtg agcattttgt ccattctgag  
420  
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agaagcccc agcaaacatc cacagatggc cctggacatc agccacatc tgaggaacat  
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gtcatgttct gggagggcta aggcatcaag taaggcctgt ggggctggag gatcacagg  
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660  
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960  
gccaccatct tggagactcg tgccctcata gtgtAACAGC accagcagat ctgcctgtc  
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1500

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1920  
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1980  
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2160  
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2400  
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2580  
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2640  
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2700  
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2760  
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2820  
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2841  
  
<210> 6198  
<211> 124  
<212> PRT  
<213> Homo sapiens  
  
<400> 6198  
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Phe His Arg Arg Ser Gln Arg Val Thr Lys Gly Ser Pro Gly Pro Gly  
20               25               30  
Ser Ser Gln His His Gly Leu Asn Thr His Trp Ala Pro Thr Leu Gly  
35               40               45  
Pro Gly Trp Gly Met Trp Gly Gln Glu Ala Ala Gln Ser Gly Arg Gln  
50               55               60  
Arg Glu Lys Cys Val Gln Arg Ala Pro Ile Ser Gly Cys Asn Val Val  
65               70               75               80  
Leu Arg Leu Trp Leu Gly Ser Ala Ser Arg Val Ser Tyr Val Leu Cys  
85               90               95  
Ser Tyr Phe Leu Ser Pro Thr Leu Pro Cys Arg Asn Pro Ser Glu Tyr  
100              105              110  
Val Ala Thr Ile Leu Glu Leu Ser Ala Leu Ile Val  
115              120

&lt;210&gt; 6199

&lt;211&gt; 1777

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6199

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240  
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300  
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960

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 1680  
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 1740  
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 1777

<210> 6200  
 <211> 164  
 <212> PRT  
 <213> Homo sapiens

<400> 6200  
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 Phe Trp Glu Glu Gly Ser Ala Pro Arg Pro Gln Glu Ser Arg Gln Arg  
 20 25 30  
 Pro Pro Lys Pro Asp Cys Gln Gln Lys Pro Ser Pro Ser Glu Gly Gln  
 35 40 45  
 Val Gly Val Pro Xaa Arg Ser Pro His Pro Gln Gly Gly Phe Thr His  
 50 55 60  
 Cys Pro Val Pro Gly Met Pro Gly Gly Arg Pro Leu Cys Cys Cys His  
 65 70 75 80  
 Cys Cys Gln His Cys Pro Ala Cys Glu Ala Arg Arg Ser Pro Cys Pro  
 85 90 95  
 Thr Arg Cys Cys Cys Ser Ser Asp Pro Cys Cys Glu Glu Trp Asp Ser  
 100 105 110  
 Trp Ser Lys Lys Leu Val Phe Leu Phe Cys Ile Asn Glu Lys Asn Pro  
 115 120 125  
 Gly Glu Ala Ala Thr Leu Pro Ser Gln Arg Asp Ala Leu Pro Cys Phe  
 130 135 140  
 Gly Val Leu Ser Pro Phe Pro Pro Leu Val Gln Gly Gln Pro Ser Arg

145	150	155	160
Ser	Ser	Trp	Phe

<210> 6201  
<211> 604  
<212> DNA  
<213> Homo sapiens

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240  
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gcgg  
604

<210> 6202  
<211> 124  
<212> PRT  
<213> Homo sapiens

<400> 6202  
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Pro Ser Asp Arg Met Arg Asp Arg Asn Ala Gln Gln Arg Ala Ile Gln  
20 25 30  
Gly Gln Trp Thr Leu Gly Arg Gly Ala Glu Trp Ala Ala Leu Arg Arg  
35 40 45  
Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro  
50 55 60  
Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His  
65 70 75 80  
Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg  
85 90 95  
Gly Gly Ser Gly Glu Gly Glu Pro Ala Glu Glu Arg Pro Gly Arg Ala  
100 105 110  
Gly Asp His Ala Gly Ala Gln Gly Glu Arg Gln Asp

115

120

<210> 6203  
<211> 3462  
<212> DNA  
<213> Homo sapiens

<400> 6203  
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120 gacggattgg gaggtttgtc tacagatttt gagcgttcga agttgacccc tgactaagta  
180 tactttgctg ctccccctcagc ctttgaaaaa atgtctgtca catatgtga ttccgttggaa  
240 gtagaagtgt ccagcgacag cttctggag gtcgggaaact acaagcggac tgtgaagcgg  
300 atcgacgatg gccaccgcct gtgcagcgac ctcatgaact gcctgcata gccccggcgc  
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420 gagaaggc cccagttacgg gaccgtggag aaggccttggaa tggccttcat gtccgaggca  
480 gagagggtga gcgagctgca cctcgaggtg aaggcctcac tcatgtaacgt tgacttcgag  
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600 accaaggaag ctgaggacgg ctttcggaag gcacagaagc cctgggcca gaagctgaaa  
660 gaggttagaaag cagcaaagaa agccacccat gcagcgtgca aagaggagaa gctggatc  
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780 caagacaaaa tagaaaagtg caagcaagat gttcttaaga ccaaagagaa gtatgagaag  
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1200 cagacaggcg accagtctct gccgagtaag cccagcagca cccttaatgt cccgagcaac  
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&lt;210&gt; 6204

&lt;211&gt; 486

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 35 40 45  
 Ala Arg Ile Glu Lys Ala Tyr Ala Gln Gln Leu Thr Glu Trp Ala Arg  
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 65 70 75 80  
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 115 120 125  
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 165 170 175  
 Lys Ala Asp Pro Ser Leu Asn Pro Glu Gln Leu Lys Lys Leu Gln Asp  
 180 185 190  
 Lys Ile Glu Lys Cys Lys Gln Asp Val Leu Lys Thr Lys Glu Lys Tyr  
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 Glu Lys Ser Leu Lys Glu Leu Asp Gln Gly Thr Pro Gln Tyr Met Glu  
 210 215 220  
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 225 230 235 240  
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260	265	270	
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275	280	285	
Asn His Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp			
290	295	300	
Ser Ala Asp Leu Asn Arg Thr Leu Ser Arg Arg Glu Lys Lys Lys Ala			
305	310	315	320
Thr Asp Gly Val Thr Leu Thr Gly Ile Asn Gln Thr Gly Asp Gln Ser			
325	330	335	
Leu Pro Ser Lys Pro Ser Ser Thr Leu Asn Val Pro Ser Asn Pro Ala			
340	345	350	
Gln Ser Ala Gln Ser Gln Ser Ser Tyr Asn Pro Phe Glu Asp Glu Asp			
355	360	365	
Asp Thr Gly Ser Thr Val Ser Glu Lys Asp Asp Thr Lys Ala Lys Asn			
370	375	380	
Val Ser Ser Tyr Glu Lys Thr Gln Ser Tyr Pro Thr Asp Trp Ser Asp			
385	390	395	400
Asp Glu Ser Asn Asn Pro Phe Ser Ser Thr Asp Ala Asn Gly Asp Ser			
405	410	415	
Asn Pro Phe Asp Asp Asp Ala Thr Ser Gly Thr Glu Val Arg Val Arg			
420	425	430	
Ala Leu Tyr Asp Tyr Glu Gly Gln Glu His Asp Glu Leu Ser Phe Lys			
435	440	445	
Ala Gly Asp Glu Leu Thr Lys Met Glu Asp Glu Asp Glu Gln Gly Trp			
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Cys Lys Gly Arg Leu Asp Asn Gly Gln Val Gly Leu Tyr Pro Ala Asn			
465	470	475	480
Tyr Val Glu Ala Ile Gln			
	485		

<210> 6205  
<211> 926  
<212> DNA  
<213> Homo sapiens

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 <213> Homo sapiens

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 Arg Glu Gly Lys Glu Phe Ala Asp Ser Gln Lys Leu Leu Phe Met Glu  
 35 40 45  
 Thr Ser Ala Lys Leu Asn His Gln Val Ser Glu Val Phe Asn Thr Val  
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 Ala Gln Glu Leu Leu Gln Arg Ser Asp Glu Glu Gly Gln Ala Leu Xaa  
 65 70 75 80  
 Gly Glu Asp Thr Pro Cys Leu Gly His Gly Gln Leu  
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 <212> DNA  
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 <211> 290  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ser Ala Ala Ala Thr Val Arg Glu Ala Gln Gly Leu Met Ala Gly Gly  
 50 55 60  
 Phe Leu Cys Phe Ser Leu Ala Phe Xaa Ala Gln Val Gln Val Val Phe  
 65 70 75 80  
 Trp Arg Leu His Ser Pro Thr Gln Val Glu Asp Ala Met Leu Asp Thr

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100	105	110
Arg Gln Glu Leu Ala Ala Ile Gln Asp Val Phe Leu Cys Cys Gly Lys		
115	120	125
Lys Ser Pro Phe Ser Arg Leu Gly Ser Thr Glu Ala Asp Leu Cys Gln		
130	135	140
Gly Glu Glu Ala Ala Arg Glu Asp Cys Leu Gln Gly Ile Arg Ser Phe		
145	150	155
Leu Arg Thr His Gln Gln Val Ala Ser Ser Leu Thr Ser Ile Gly Leu		
165	170	175
Ala Leu Thr Val Ser Ala Leu Leu Phe Ser Ser Phe Leu Trp Phe Ala		
180	185	190
Ile Arg Cys Gly Cys Ser Leu Asp Arg Lys Gly Lys Tyr Thr Leu Thr		
195	200	205
Pro Arg Ala Cys Gly Arg Gln Pro Gln Glu Pro Ser Leu Leu Arg Cys		
210	215	220
Ser Gln Gly Gly Pro Thr His Cys Leu His Ser Glu Ala Val Ala Ile		
225	230	235
Gly Pro Arg Gly Cys Ser Gly Ser Leu Arg Trp Leu Gln Glu Ser Asp		
245	250	255
Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala Ala His Arg Ala Leu		
260	265	270
Gln Gly Arg Ser Arg Gly Gly Leu Ser Gly Cys Pro Glu Arg Gly Leu		
275	280	285
Ser Asp		
290		

&lt;210&gt; 6209

&lt;211&gt; 2269

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6209

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<212> PRT  
<213> Homo sapiens

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Ser Pro Ser Leu Arg Gly Thr His Leu Leu Phe Leu Pro Gln Ala Asp  
35 40 45  
Val Val Asp Glu Ala Ile Asp Ser Leu Ala Arg Thr Lys Gly Val Met  
50 55 60  
Lys Pro Pro Cys Ser Glu Gly Ser Pro Trp Arg Cys Pro His Phe Thr  
65 70 75 80  
Cys Trp Val Leu Gln Ala Arg Lys Pro Gly Ser Gly Gly Thr Arg Glu  
85 90 95  
Arg Gln Ala Cys Val Trp Thr Ser Ala Gly Ala Ala Leu Arg Leu  
100 105 110  
Ala Arg Glu Arg Gln Arg Trp Val Phe Arg Phe His Ala Tyr Val Trp  
115 120 125  
Ala His Ser Gln His Gly Arg Val Ser Ala Val Leu Val Leu Thr Leu  
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<212> DNA  
<213> Homo sapiens

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 <213> Homo sapiens

<400> 6212  
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 Lys Gln Glu Leu Ala Glu Thr Leu Ala Asn Leu Glu Arg Gln Ile Tyr  
 35 40 45  
 Ala Phe Glu Gly Ser Tyr Leu Glu Asp Thr Gln Met Tyr Gly Asn Ile  
 50 55 60  
 Ile Arg Gly Trp Xaa Ser Val Ser Asp Gln Pro Xaa Lys Asn Ser Asn  
 65 70 75 80  
 Ser Lys Asn Asp Arg Arg Asn Arg Lys Phe Lys Glu Ala Glu Arg Leu  
 85 90 95  
 Phe Ser Lys Ser Ser Val Thr Ser Ala Ala Ala Val Ser Ala Leu Ala  
 100 105 110  
 Gly Val Gln Asp Gln Leu Ile Glu Lys Arg Glu Pro Gly Ser Gly Thr  
 115 120 125  
 Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser  
 130 135 140  
 Gln Glu Asp Pro Glu Asp Leu Asp Gly Ser Val Gln Gly Val Lys Pro  
 145 150 155 160  
 Gln Lys Ala Ala Ser Ser Thr Ser Ser Gly Ser His His Ser Ser His  
 165 170 175  
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 Tyr Asp Phe Glu Ile Asp Leu Lys Leu Asn Lys Lys Pro Arg Ala Asp  
 195 200 205  
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<210> 6213  
 <211> 1160  
 <212> DNA  
 <213> Homo sapiens

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 360  
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 <212> PRT  
 <213> Homo sapiens

<400> 6214  
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 35 40 45  
 Pro Pro Pro Pro Pro Thr Pro Pro Pro Thr Cys Ile Ala Gln Ile Gln  
 50 55 60  
 Val Met Met Glu Gln Ile Arg Pro Trp His Ser Arg Met Lys Arg Arg  
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 Lys Gly Val Met Glu Gln Ser Leu Glu Pro Ala Ala Ser Ser Gly  
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<210> 6215  
<211> 651  
<212> DNA  
<213> Homo sapiens

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<210> 6216  
<211> 87  
<212> PRT  
<213> Homo sapiens

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Glu Ala Val Ala Ile Gly Pro Arg Gly Cys Ser Gly Ser Leu Arg Trp  
35 40 45  
Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala  
50 55 60  
Ala His Arg Ala Leu Gln Gly Arg Ser Arg Gly Gly Leu Ser Gly Cys  
65 70 75 80  
Pro Glu Arg Gly Leu Ser Asp  
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<210> 6217  
<211> 2955  
<212> DNA  
<213> Homo sapiens

<400> 6217

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240  
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360  
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2160  
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2280  
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<210> 6218  
<211> 133  
<212> PRT  
<213> Homo sapiens  
  
<400> 6218  
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Gly Tyr Ile Cys Arg Ile Cys His Lys Phe Tyr His Ser Asn Ser Gly			
35	40	45	
Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln			
50	55	60	
Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser			
65	70	75	80
Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr			
85	90	95	
Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro			
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Ser Lys Val Thr Ala Arg Pro Ser Gln Pro Pro Leu Pro Arg Arg Ser			
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Thr Arg Leu Lys Thr			
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<210> 6219  
<211> 2495  
<212> DNA  
<213> Homo sapiens

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900

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<210> 6220  
<211> 179  
<212> PRT  
<213> Homo sapiens

<400> 6220  
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Ser Ala Gly Asn Thr Ala Arg Cys Pro Gln Thr Pro Gly Ser Ala Gln  
35 40 45  
Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser  
50 55 60  
Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser  
65 70 75 80  
Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp  
85 90 95  
Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro  
100 105 110  
Leu Pro Ser Pro Arg Pro Val Cys Trp Asp Gly Ala Ser Thr Leu Arg  
115 120 125  
Leu Val Lys Ala Glu Leu Asn Ser Ser Asn Glu Ser Ala Gly Trp Ala  
130 135 140  
Trp Gly Asp Gly Glu Gln Ala Pro Pro Arg Ala Ser Ser Glu Gly Gly  
145 150 155 160  
Asp Ala Ala Pro Phe Leu Pro Ala Ala Gln Thr Ala Pro Thr Gly Ser  
165 170 175  
Gly Ala Gly

<210> 6221  
<211> 1487  
<212> DNA  
<213> Homo sapiens

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 1380  
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 1487

<210> 6222  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 6222  
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 35 40 45  
 Pro Thr Ser Gly Asp Glu Tyr Ser Arg Gly Phe Leu Gln Asn Leu Asn  
 50 55 60  
 Leu Ile Gln Asp Gln Asn Ala Gln Thr Arg Trp Lys Gln Gly Arg Tyr  
 65 70 75 80  
 Asp Glu Asp Gly Lys Pro Phe Asn Gln Arg Ser Leu Leu Leu Gly His  
 85 90 95  
 Glu Arg Ile Leu Thr Arg Ala Lys Ser Tyr Glu Cys Ser Glu Cys Gly

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Gln Arg Ser Ala Leu Thr Val His Lys Gln Cys His Leu Gln Asn Lys		
145	150	155
Pro Tyr Arg Cys His Asp Cys Gly Lys Cys Phe Arg Gln Leu Ala Tyr		
165	170	175
Leu Val Glu His Lys Arg Ile His Thr Lys Glu Lys Pro Tyr Lys Cys		
180	185	190
Ser Lys Cys Glu Lys Thr Phe Ser Gln Asn Ser Thr Leu Ile Arg His		
195	200	205
Gln Val Ile His Ser Gly Glu Lys Arg His Lys Cys Leu Glu Cys Gly		
210	215	220
Lys Ala Phe Gly Arg His Ser Thr Leu Leu Cys His Gln Gln Ile His		
225	230	235
Ser Lys Pro Asn Thr His Lys Cys Ser Glu Cys Gly Gln Ser Phe Gly		
245	250	255
Arg Asn Val Asp Leu Ile Gln His Gln Arg Ile His Thr Lys Glu Glu		
260	265	270
Phe Phe Gln Cys Gly Glu Cys Gly Lys Thr Phe Ser Phe Lys Arg Asn		
275	280	285
Leu Phe Arg His Gln Val Ile His Thr Gly Ser Gln Leu Tyr Gln Cys		
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&lt;210&gt; 6223

&lt;211&gt; 944

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6223

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<210> 6224  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<400> 6224  
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 Asn Pro Glu Gly Val Asn His Glu Asn Gly Met Asn Arg Asp Gly  
 50 55 60  
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 65 70 75 80  
 Pro Gln Pro Pro Pro Glu Glu Pro Ala Gln Ala Ala Met Glu Gly Pro  
 85 90 95  
 Gln Pro Glu Asn Met Gln Pro Arg Thr Arg Arg Thr Lys Phe Thr Leu  
 100 105 110  
 Leu Gln Val Glu Glu Leu Glu Ser Val Phe Arg His Thr Gln Tyr Pro  
 115 120 125  
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 Asp Lys Val Arg Val Ser Thr Leu Glu Lys Ala Ile  
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<210> 6225  
 <211> 3851  
 <212> DNA  
 <213> Homo sapiens

<400> 6225  
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3300  
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3360  
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3420

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 3851

<210> 6226  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<400> 6226  
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 Gln Gly Asp Phe Ile Lys Cys Val Glu Gln Lys Thr Asp Ala Leu Gly  
 35 40 45  
 Lys Gln Ser Val Asn Arg Gly Phe Thr Lys Asp Lys Thr Leu Ser Ser  
 50 55 60  
 Ile Phe Asn Ile Glu Met Val Lys Glu Lys Thr Ala Glu Glu Ile Lys  
 65 70 75 80  
 Gln Ile Trp Gln Gln Tyr Phe Ala Ala Lys Asp Thr Val Tyr Ala Val  
 85 90 95  
 Ile Pro Ala Glu Lys Phe Asp Leu Ile Trp Asn Arg Ala Gln Ser Cys  
 100 105 110  
 Pro Thr Phe Leu Cys Ala Leu Pro Arg Arg Glu Gly Tyr Glu Phe Phe  
 115 120 125  
 Val Gly Gln Trp Thr Gly Thr Glu Leu His Phe Thr Ala Leu Ile Asn  
 130 135 140  
 Ile Gln Thr Arg Gly Glu Ala Ala Ser Gln Leu Ile Leu Tyr His  
 145 150 155 160  
 Tyr Pro Glu Leu Lys Glu Glu Lys Gly Ile Val Leu Met Thr Ala Glu  
 165 170 175  
 Met Asp Ser Thr Phe Leu Asn Val Ala Glu Ala Gln Cys Ile Ala Asn  
 180 185 190  
 Gln Val Gln Leu Phe Tyr Ala Thr Asp Arg Lys Glu Thr Tyr Gly Leu  
 195 200 205  
 Val Glu Thr Phe Asn Leu Arg Pro Asn Glu Phe Lys Tyr Met Ser Val  
 210 215 220  
 Ile Ala Glu Leu Glu Gln Ser Gly Leu Gly Ala Glu Leu Lys Cys Ala  
 225 230 235 240  
 Gln Asn Gln Asn Lys Thr

245

<210> 6227  
<211> 830  
<212> DNA  
<213> Homo sapiens

<400> 6227  
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300  
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360  
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420  
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660  
gcagtaaagg aattagaagc tctcttgggt tttacattga gagtaggtgt tccaaacact  
720  
cggcctgtga aaaagacat ggaaattccg aaagattcct tgcagaagta cctcaaagac  
780  
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830

<210> 6228  
<211> 271  
<212> PRT  
<213> Homo sapiens

<400> 6228  
Lys His Thr Gln Arg Arg His Gln Gly Ser His Arg Trp Thr His Leu  
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Gly Gly Ser Thr Tyr Arg Ala Val Ile Phe Asp Met Gly Gly Val Leu  
20 25 30  
Ile Pro Ser Pro Gly Arg Val Ala Ala Glu Trp Glu Val Gln Asn Arg  
35 40 45  
Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn  
50 55 60  
Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe  
65 70 75 80  
Leu Arg Glu Phe Gly Arg Leu Cys Ser Glu Met Leu Lys Thr Ser Val

85	90	95
Pro Val Asp Ser Phe Phe Ser Leu Leu Thr Ser Glu Arg Val Ala Lys		
100	105	110
Gln Phe Pro Val Met Thr Glu Ala Ile Thr Gln Ile Arg Ala Lys Gly		
115	120	125
Leu Gln Thr Ala Val Leu Ser Asn Asn Phe Tyr Leu Pro Asn Gln Lys		
130	135	140
Ser Phe Leu Pro Leu Asp Arg Lys Gln Phe Asp Val Ile Val Glu Ser		
145	150	155
Cys Met Glu Gly Ile Cys Lys Pro Asp Pro Arg Ile Tyr Lys Leu Cys		
165	170	175
Leu Glu Gln Leu Gly Leu Gln Pro Ser Glu Ser Ile Phe Leu Asp Asp		
180	185	190
Leu Gly Thr Asn Leu Lys Glu Ala Ala Arg Leu Gly Ile His Thr Ile		
195	200	205
Lys Val Asn Asp Pro Glu Thr Ala Val Lys Glu Leu Glu Ala Leu Leu		
210	215	220
Gly Phe Thr Leu Arg Val Gly Val Pro Asn Thr Arg Pro Val Lys Lys		
225	230	235
Thr Met Glu Ile Pro Lys Asp Ser Leu Gln Lys Tyr Leu Lys Asp Leu		
245	250	255
Leu Gly Ile Gln Thr Thr Gly Pro Leu Glu Leu Leu Gln Phe Asp		
260	265	270

&lt;210&gt; 6229

&lt;211&gt; 3105

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6229

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420 tgccgaggc ccccggtgaa ggatccggag gcagagcacc ccaagaaggt gcagcggggc  
480 gaggggtggag gccgttagctt ccctcggtcc tccctggAAC atggctcaga tgtgtacctt  
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1440  
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1980  
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2040  
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2100  
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2160  
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2280  
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2340

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 ccaccaaggc ctttttaat aagaaaaaaaaaaaaaaa aaaaa  
 3105

<210> 6230  
 <211> 944  
 <212> PRT  
 <213> Homo sapiens

<400> 6230  
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 Ser Leu Val Ser Ala Leu Asp Ser Met Cys Ser Ala Leu Ser Lys Leu  
 35 40 45  
 Asn Ala Glu Val Ala Cys Val Ala Val His Asp Glu Ser Ala Phe Val  
 50 55 60  
 Val Gly Thr Glu Lys Gly Arg Met Phe Leu Asn Ala Arg Lys Glu Leu  
 65 70 75 80  
 Gln Ser Asp Phe Leu Arg Phe Cys Arg Gly Pro Pro Trp Lys Asp Pro  
 85 90 95  
 Glu Ala Glu His Pro Lys Lys Val Gln Arg Gly Glu Gly Gly Arg  
 100 105 110  
 Ser Leu Pro Arg Ser Ser Leu Glu His Gly Ser Asp Val Tyr Leu Leu  
 115 120 125  
 Arg Lys Met Val Glu Glu Val Phe Asp Val Leu Tyr Ser Glu Ala Leu  
 130 135 140  
 Gly Arg Ala Ser Val Val Pro Leu Pro Tyr Glu Arg Leu Leu Arg Glu  
 145 150 155 160  
 Pro Gly Leu Leu Ala Val Gln Gly Leu Pro Glu Gly Leu Ala Phe Arg

	165	170	175
Arg Pro Ala Glu Tyr Asp Pro Lys Ala Leu Met Ala Ile Leu Glu His			
180	185	190	
Ser His Arg Ile Arg Phe Lys Leu Lys Arg Pro Leu Glu Asp Gly Gly			
195	200	205	
Arg Asp Ser Lys Ala Leu Val Glu Leu Asn Gly Val Ser Leu Ile Pro			
210	215	220	
Lys Gly Ser Arg Asp Cys Gly Leu His Gly Gln Ala Pro Lys Val Pro			
225	230	235	240
Pro Gln Asp Leu Pro Pro Thr Ala Thr Ser Ser Ser Met Ala Ser Phe			
245	250	255	
Leu Tyr Ser Thr Ala Leu Pro Asn His Ala Ile Arg Glu Leu Lys Gln			
260	265	270	
Glu Ala Pro Ser Cys Pro Leu Ala Pro Ser Asp Leu Gly Leu Ser Arg			
275	280	285	
Pro Met Pro Glu Pro Lys Ala Thr Gly Ala Gln Asp Phe Ser Asp Cys			
290	295	300	
Cys Gly Gln Lys Pro Thr Gly Pro Gly Gly Pro Leu Ile Gln Asn Val			
305	310	315	320
His Ala Ser Lys Arg Ile Leu Phe Ser Ile Val His Asp Lys Ser Glu			
325	330	335	
Lys Trp Asp Ala Phe Ile Lys Glu Thr Glu Asp Ile Asn Thr Leu Arg			
340	345	350	
Glu Cys Val Gln Ile Leu Phe Asn Ser Arg Tyr Ala Glu Ala Leu Gly			
355	360	365	
Leu Gly Asn Met Val Pro Val Pro Tyr Arg Lys Ile Ala Cys Asp Pro			
370	375	380	
Glu Ala Val Glu Ile Val Gly Ile Pro Asp Lys Ile Pro Phe Lys Arg			
385	390	395	400
Pro Cys Thr Tyr Gly Val Pro Lys Leu Lys Arg Ile Leu Glu Glu Arg			
405	410	415	
His Ser Ile His Phe Ile Ile Lys Arg Met Phe Asp Glu Arg Ile Phe			
420	425	430	
Thr Gly Asn Lys Phe Thr Lys Asp Thr Thr Lys Leu Glu Pro Ala Ser			
435	440	445	
Pro Pro Glu Asp Thr Ser Ala Glu Val Ser Arg Ala Thr Val Leu Asp			
450	455	460	
Leu Ala Gly Asn Ala Arg Ser Asp Lys Gly Ser Met Ser Glu Asp Cys			
465	470	475	480
Gly Pro Gly Thr Ser Gly Glu Leu Gly Gly Leu Arg Pro Ile Lys Ile			
485	490	495	
Glu Pro Glu Asp Leu Asp Ile Ile Gln Val Thr Val Pro Asp Pro Ser			
500	505	510	
Pro Thr Ser Glu Glu Met Thr Asp Ser Met Pro Gly His Leu Pro Ser			
515	520	525	
Glu Asp Ser Gly Tyr Gly Met Glu Met Leu Thr Asp Lys Gly Leu Ser			
530	535	540	
Glu Asp Ala Arg Pro Glu Glu Arg Pro Val Glu Asp Ser His Gly Asp			
545	550	555	560
Val Ile Arg Pro Leu Arg Lys Gln Val Glu Leu Leu Phe Asn Thr Arg			
565	570	575	
Tyr Ala Lys Ala Ile Gly Ile Ser Glu Pro Val Lys Val Pro Tyr Ser			
580	585	590	
Lys Phe Leu Met His Pro Glu Glu Leu Phe Val Val Gly Leu Pro Glu			

595	600	605
Gly Ile Ser Leu Arg Arg Pro Asn Cys Phe Gly Ile Ala Lys Leu Arg		
610	615	620
Lys Ile Leu Glu Ala Ser Asn Ser Ile Gln Phe Val Ile Lys Arg Pro		
625	630	635
Glu Leu Leu Thr Glu Gly Val Lys Glu Pro Ile Val Asp Ser Gln Glu		
645	650	655
Arg Asp Ser Gly Asp Pro Leu Val Asp Glu Ser Leu Lys Arg Gln Gly		
660	665	670
Phe Gln Glu Asn Tyr Asp Ala Arg Leu Ser Arg Ile Asp Ile Ala Asn		
675	680	685
Thr Leu Arg Glu Gln Val Gln Asp Leu Phe Asn Lys Lys Tyr Gly Glu		
690	695	700
Ala Leu Gly Ile Lys Tyr Pro Val Gln Val Pro Tyr Lys Arg Ile Lys		
705	710	715
Ser Asn Pro Gly Ser Val Ile Ile Glu Gly Leu Pro Pro Gly Ile Pro		
725	730	735
Phe Arg Lys Pro Cys Thr Phe Gly Ser Gln Asn Leu Glu Arg Ile Leu		
740	745	750
Ala Val Ala Asp Lys Ile Lys Phe Thr Val Thr Arg Pro Phe Gln Gly		
755	760	765
Leu Ile Pro Lys Pro Asp Glu Asp Asp Ala Asn Arg Leu Gly Glu Lys		
770	775	780
Val Ile Leu Arg Glu Gln Val Lys Glu Leu Phe Asn Glu Lys Tyr Gly		
785	790	795
Glu Ala Leu Gly Leu Asn Arg Pro Val Leu Val Pro Tyr Lys Leu Ile		
805	810	815
Arg Asp Ser Pro Asp Ala Val Glu Val Thr Gly Leu Pro Asp Asp Ile		
820	825	830
Pro Phe Arg Asn Pro Asn Thr Tyr Asp Ile His Arg Leu Glu Lys Ile		
835	840	845
Leu Lys Ala Arg Glu His Val Arg Met Val Ile Ile Asn Gln Leu Gln		
850	855	860
Pro Phe Ala Glu Ile Cys Asn Asp Ala Lys Val Pro Ala Lys Asp Ser		
865	870	875
Ser Ile Pro Lys Arg Lys Arg Lys Arg Val Ser Glu Gly Asn Ser Val		
885	890	895
Ser Asn Pro Asp Ser		
900	905	910
Val Ala Ser Ala Asn Gln Ile Ser Leu Val Gln Trp Pro Met Tyr Met		
915	920	925
Val Asp Tyr Ala Gly Leu Asn Val Gln Leu Pro Gly Pro Leu Asn Tyr		
930	935	940

&lt;210&gt; 6231

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6231

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 120

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 240  
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<210> 6232  
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 <212> PRT  
 <213> Homo sapiens

<400> 6232  
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 35 40 45  
 Trp Arg Arg Lys Arg Gly Pro Lys Pro Pro Val Ala Pro Ile Ser Ile  
 50 55 60  
 Trp Asn Gly Thr Thr Pro Arg Gly Glu Pro Pro Pro Asn His Ser Ser  
 65 70 75 80  
 Lys Lys Gly Thr Lys Lys Trp Ala Leu Asp Phe Ser Thr Pro Glu Thr  
 85 90 95  
 Gln Phe Pro Pro Pro Gly Arg Pro Phe Leu Gly Ile Pro Thr Trp Asp  
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<210> 6233  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 6234

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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20	25	30	
Glu Ala Leu Met Leu Arg Asp Gly Arg Phe Ala Cys Ala Ile Cys Pro			
35	40	45	
His Arg Pro Val Leu Asp Thr Leu Ala Met Leu Thr Ala His Arg Ala			
50	55	60	
Gly Lys Lys His Leu Ser Ser Leu Gln Leu Phe Tyr Gly Lys Lys Gln			
65	70	75	80
Pro Gly Lys Glu Arg Lys Gln Asn Pro Lys His Gln Asn Glu Leu Arg			
85	90	95	
Arg Glu Glu Thr Lys Ala Glu Ala Pro Leu Leu Thr Gln Thr Arg Leu			
100	105	110	
Ile Thr Gln Ser Ala Leu His Arg Ala Pro His Tyr Asn Ser Cys Cys			
115	120	125	
Arg Arg Lys Tyr Arg Pro Glu Ala Pro Gly Pro Ser Val Ser Leu Ser			
130	135	140	
Pro Met Pro Pro Ser Glu Val Lys Leu Gln Ser Gly Lys Ile Ser Arg			
145	150	155	160
Glu Pro Glu Pro Ala Ala Gly Pro Gln Ala Glu Glu Ser Ala Thr Val			
165	170	175	
Ser Ala Pro Ala Pro Met Ser Pro Thr Arg Arg Arg Ala Leu Asp His			
180	185	190	
Tyr Leu Thr Leu Arg Ser Ser Gly Trp Ile Pro Asp Gly Arg Gly Arg			
195	200	205	
Trp Val Lys Asp Glu Asn Val Glu Phe Asp Ser Asp Glu Glu Glu Pro			

<p>210 Pro Asp Leu Pro Leu Asp 225</p> <p>&lt;210&gt; 6235 &lt;211&gt; 3427 &lt;212&gt; DNA &lt;213&gt; Homo sapiens</p> <p>&lt;400&gt; 6235 cctaggggcgc ccgaacccgc ggccggcggtg gggacaatgt ggttcttgc cccggaccccg 60 gtccgggact ttccgttca gctcatcccc gagcccccaag agggcggtct gcggggggccc 120 tggccctgc accgcggccg caagaaggcc acaggcagcc ccgtgtccat cttcgcttat 180 gatgtgaagc ctggcgccga agagcagacc caggtggcca aagctgcctt caagcgcttc 240 aaaactctac ggcacccaa catcctggct tacatcgatg gactggagac agaaaaatgc 300 ctccacgtcg tgacagaggc tggaccccg ttggaaatat acctaaggc gagagtggag 360 gctgggtggcc tgaaggagct ggagatctcc tgggggtcac accagatcgt gaaagccctc 420 agcttcctgg tcaacgactg cagcctcate cacaacaatg tctgcattgc cgccgtgttc 480 gtggacccgag ctggcgagtg gaagcttggg ggcctggact acatgtattc ggcccgaggc 540 aacggtgtggg gaccccccgg caaggggatc cccgagcttg agcagtatga ccccccggag 600 ttggctgaca gcagtggcag agtggtcaga gagaagtgg cagcagacat gtggcgcttg 660 ggctgcctca ttggaaagt cttcaatggg cccctacctc gggcagcagc cttacgcaac 720 cctggaaaga tccccaaaac gctggtgccc cattactgtg agctggtggg agcaaacc 780 aaagtacgta ccaacccagc ccgttcttg cagaactgtc gggcacctgg tggcttcatt 840 agcaaccgct ttgtggagac caacctgttc ctggaggaga ttcagatcaa agagccagcc 900 gagaagcaaa aattttcca agagctgagc aagagcctgg acgcattccc tgaggatttc 960 tgtcgccaca aggtgtgcc ccagctgtc accgccttcg agttcgaa tgctggggcc 1020 gttgtccctca cggccctctt caaggtggc aagttcctga ggcgtgagga gtatcagcag 1080 aagatcatec ctgtgggtt caagatgttc tcattccactg accggggccat ggcgcattccgc 1140 ctccgtcagc agatggagca gttcatccag taccttgacg agccaacagt caacacccag 1200 atcttcccccc acgtcgata tggcttcctg gacaccaacc ctgcacccatggagc 1260 gtcaagtcca tgctgtctt ggccccaag ctgaacgagg ccaacctcaa tggagatgt 1320</p>	<p>215</p> <p>220</p>
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<210> 6236  
<211> 820  
<212> PRT  
<213> Homo sapiens

<400> 6236  
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 Pro Glu Gly Gly Leu Pro Gly Pro Trp Ala Leu His Arg Gly Arg Lys  
 35 40 45  
 Lys Ala Thr Gly Ser Pro Val Ser Ile Phe Val Tyr Asp Val Lys Pro  
 50 55 60  
 Gly Ala Glu Glu Gln Thr Gln Val Ala Lys Ala Ala Phe Lys Arg Phe  
 65 70 75 80  
 Lys Thr Leu Arg His Pro Asn Ile Leu Ala Tyr Ile Asp Gly Leu Glu  
 85 90 95  
 Thr Glu Lys Cys Leu His Val Val Thr Glu Ala Val Thr Pro Leu Gly  
 100 105 110  
 Ile Tyr Leu Lys Ala Arg Val Glu Ala Gly Gly Leu Lys Glu Leu Glu  
 115 120 125  
 Ile Ser Trp Gly Leu His Gln Ile Val Lys Ala Leu Ser Phe Leu Val  
 130 135 140  
 Asn Asp Cys Ser Leu Ile His Asn Asn Val Cys Met Ala Ala Val Phe  
 145 150 155 160  
 Val Asp Arg Ala Gly Glu Trp Lys Leu Gly Leu Asp Tyr Met Tyr  
 165 170 175  
 Ser Ala Gln Gly Asn Gly Gly Pro Pro Arg Lys Gly Ile Pro Glu  
 180 185 190  
 Leu Glu Gln Tyr Asp Pro Pro Glu Leu Ala Asp Ser Ser Gly Arg Val  
 195 200 205  
 Val Arg Glu Lys Trp Ser Ala Asp Met Trp Arg Leu Gly Cys Leu Ile  
 210 215 220  
 Trp Glu Val Phe Asn Gly Pro Leu Pro Arg Ala Ala Leu Arg Asn

225	230	235	240
Pro Gly Lys Ile Pro Lys Thr Leu Val Pro His Tyr Cys Glu Leu Val			
245	250	255	
Gly Ala Asn Pro Lys Val Arg Pro Asn Pro Ala Arg Phe Leu Gln Asn			
260	265	270	
Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val Glu Thr Asn			
275	280	285	
Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu Lys Gln Lys			
290	295	300	
Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro Glu Asp Phe			
305	310	315	320
Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe Glu Phe Gly			
325	330	335	
Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val Gly Lys Phe			
340	345	350	
Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val Val Val Lys			
355	360	365	
Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu Leu Gln Gln			
370	375	380	
Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val Asn Thr Gln			
385	390	395	400
Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn Pro Ala Ile			
405	410	415	
Arg Glu Gln Thr Val Lys Ser Met Leu Leu Ala Pro Lys Leu Asn			
420	425	430	
Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala Arg Leu Gln			
435	440	445	
Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr Val Cys Leu			
450	455	460	
Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His Arg Val Leu			
465	470	475	480
Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala Pro Ser Arg			
485	490	495	
Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu Tyr Ser Met			
500	505	510	
Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly Leu Thr Val			
515	520	525	
Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala Ile Arg Ser			
530	535	540	
Phe Leu Ser Lys Leu Glu Ser Val Ser Glu Asp Pro Thr Gln Leu Glu			
545	550	555	560
Glu Val Glu Lys Asp Val His Ala Ala Ser Ser Pro Gly Met Gly Gly			
565	570	575	
Ala Ala Ala Ser Trp Ala Gly Trp Ala Val Thr Gly Val Ser Ser Leu			
580	585	590	
Thr Ser Lys Leu Ile Arg Ser His Pro Thr Thr Ala Pro Thr Glu Thr			
595	600	605	
Asn Ile Pro Gln Arg Pro Thr Pro Glu Gly Val Pro Ala Pro Ala Pro			
610	615	620	
Thr Pro Val Pro Ala Thr Pro Thr Thr Ser Gly His Trp Glu Thr Gln			
625	630	635	640
Glu Glu Asp Lys Asp Thr Ala Glu Asp Ser Ser Thr Ala Asp Arg Trp			
645	650	655	
Asp Asp Glu Asp Trp Gly Ser Leu Glu Gln Glu Ala Glu Ser Val Leu			

660	665	670
Ala Gln Gln Asp Asp Trp Ser Thr Gly Gly Gln Val Ser Arg Ala Ser		
675	680	685
Gln Val Ser Asn Ser Asp His Lys Ser Ser Lys Ser Pro Glu Ser Asp		
690	695	700
Trp Ser Ser Trp Glu Ala Glu Gly Ser Trp Glu Gln Gly Trp Gln Glu		
705	710	715
Pro Ser Ser Gln Glu Pro Pro Pro Asp Gly Thr Arg Leu Ala Ser Glu		
725	730	735
Tyr Asn Trp Gly Gly Pro Glu Ser Ser Asp Lys Gly Asp Pro Phe Ala		
740	745	750
Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro Arg Pro Asp Ser Trp Gly		
755	760	765
Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp Ser Arg Gln Val Lys Ala		
770	775	780
Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg Arg Arg Glu Met Glu Ala		
785	790	795
Lys Arg Ala Glu Arg Lys Val Ala Lys Gly Pro Met Lys Leu Gly Ala		
805	810	815
Arg Lys Leu Asp		
820		

&lt;210&gt; 6237

&lt;211&gt; 494

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6237

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 240  
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&lt;210&gt; 6238

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6238

Met Leu Phe Arg Asn Arg Phe Leu Leu Leu Ala Leu Ala Ala Leu

1	5	10	15												
Leu	Ala	Phe	Val	Ser	Leu	Ser	Leu	Gln	Phe	Phe	His	Leu	Ile	Pro	Val
		20			25						30				
Ser	Thr	Pro	Lys	Asn	Gly	Met	Ser	Ser	Lys	Ser	Arg	Lys	Arg	Ile	Met
		35			40						45				
Pro	Asp	Pro	Val	Thr	Glu	Pro	Pro	Val	Thr	Asp	Pro	Val	Tyr	Glu	Ala
		50			55						60				
Leu	Leu	Tyr	Cys	Asn	Ile	Pro	Ser	Val	Ala	Glu	Arg	Ser	Met	Glu	Gly
		65			70					75				80	
His	Ala	Pro	His	His	Phe	Lys	Leu	Val	Ser	Val	His	Val	Phe	Ile	Arg
		85								90				95	
His	Gly	Asp	Arg	Tyr	Pro	Leu	Tyr	Val	Ile	Pro	Lys	Thr	Lys	Arg	Pro
		100								105				110	
Glu	Ile	Asp	Cys	Thr	Leu	Val	Ala	Asn	Arg	Lys	Pro	Tyr	His	Pro	Lys
		115			120					125					
Leu	Glu	Ala	Phe	Ile	Ser	His	Met	Leu	Arg	Gly	Ser	Gly			
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&lt;210&gt; 6239

<211> 911  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 6239

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aaaaaaaaaa a  
911

<210> 6240  
<211> 235  
<212> PRT  
<213> Homo sapiens

<400> 6240  
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Leu Glu Leu Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val  
35 40 45  
Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe  
50 55 60  
Gly Pro Leu Gly Phe Ser Phe Phe Asn Met Leu Phe Val Phe Arg  
65 70 75 80  
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp  
85 90 95  
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Ser Ile Cys Lys Lys Lys Gln Asn Arg His Phe Ile Val Pro Ala Ser		
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Asn Thr His Lys Ala Gln His Thr Phe Cys Lys Arg Cys Gly Val Gln		
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720		
Gly Trp Asp Arg Lys Tyr Ile Val Leu Glu Gly Ser Lys Val Leu Ile		
725	730	735
Tyr Asp Asn Glu Ala Arg Glu Ala Gly Gln Arg Pro Val Glu Glu Phe		
740	745	750
Glu Leu Cys Leu Pro Asp Gly Asp Val Ser Ile His Gly Ala Val Gly		
755	760	765
Ala Ser Glu Leu Ala Asn Thr Ala Lys Ala Asp Val Pro Tyr Ile Leu		
770	775	780
Lys Met Glu Ser His Pro His Thr Thr Cys Trp Pro Gly Arg Thr Leu		
785	790	795
800		
Tyr Leu Leu Ala Pro Ser Phe Pro Asp Lys Gln Arg Trp Val Thr Ala		
805	810	815
Leu Glu Ser Val Val Ala Gly Gly Arg Val Ser Arg Glu Lys Ala Glu		
820	825	830
Ala Asp Ala Lys Leu Leu Gly Asn Ser Leu Leu Lys Leu Glu Gly Asp		
835	840	845
Asp Arg Leu Asp Met Asn Cys Thr Leu Pro Phe Ser Asp Gln Val Val		
850	855	860
Leu Val Gly Thr Glu Glu Gly Leu Tyr Ala Leu Asn Val Leu Lys Asn		
865	870	875
880		
Ser Leu Thr His Val Pro Gly Ile Gly Ala Val Phe Gln Ile Tyr Ile		
885	890	895
Ile Lys Asp Leu Glu Lys Leu Leu Met Ile Ala Gly Glu Glu Arg Ala		
900	905	910
Leu Cys Leu Val Asp Val Lys Lys Val Lys Gln Ser Leu Ala Gln Ser		
915	920	925
His Leu Pro Ala Gln Pro Asp Ile Ser Pro Asn Ile Phe Glu Ala Val		
930	935	940
Lys Gly Cys His Leu Phe Gly Ala Gly Lys Ile Glu Asn Gly Leu Cys		
945	950	955
960		
Ile Cys Ala Ala Met Pro Ser Lys Val Val Ile Leu Arg Tyr Asn Glu		
965	970	975
Asn Leu Ser Lys Tyr Cys Ile Arg Lys Glu Ile Glu Thr Ser Glu Pro		
980	985	990
Cys Ser Cys Ile His Phe Thr Asn Tyr Ser Ile Leu Ile Gly Thr Asn		
995	1000	1005
Lys Phe Tyr Glu Ile Asp Met Lys Gln Tyr Thr Leu Glu Glu Phe Leu		

1010	1015	1020
Asp Lys Asn Asp His Ser Leu Ala Pro Ala Val Phe Ala Ala Ser Ser		
1025	1030	1035
Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg		1040
1045	1050	1055
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser		
1060	1065	1070
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro		
1075	1080	1085
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn		
1090	1095	1100
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro		
1105	1110	1115
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala		1120
1125	1130	1135
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu		
1140	1145	1150
Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu		
1155	1160	1165
His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly		
1170	1175	1180
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro		
1185	1190	1195
Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His		1200
1205	1210	1215
Arg Tyr Arg Glu Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly		
1220	1225	1230
Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg		
1235	1240	1245
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg		
1250	1255	1260
Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val		
1265	1270	1275
Trp Asp Gln Ser Ser Val		1280
	1285	

<210> 6247  
<211> 497  
<212> DNA  
<213> Homo sapiens

<400> 6247  
gcggccgcag cgctgaatgg ggtggaccga cgttccctgc agcgttcaca aggctggctc  
60 tagaagtgct ggagagggcc aagaggaggg cggtgactg gcatgccctg gagcgtcccc  
120 aaggctgcat ggggtcctt gcccgagg cgcacccacct agagaaacag ccggcagccg  
180 gccccgcagcg cgttctcccg ggagagaaaattattcatc tggccagag gaaggaggg  
240 caacccatgt ctatcgatat cacagaggcg agtcaagct gcacatgtgc ttggacatag  
300 ggaatggtca gagaaaagac agaaaaaaga catcccttgg tcctggaggc agctatcaa  
360

tatcagagca tgctccagag gcatcccagc ctgtgagttac ggaactgctt acgcactggg  
420  
tttcaccacc gttgcaactc catgaaccag ttgacatggc tcttagaggg ctatggaaat  
480  
tgagtctata gtatggaa  
497

<210> 6248  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 6248  
Met Gly Trp Thr Asp Val Pro Cys Ser Val His Lys Ala Gly Ser Arg  
1 5 10 15  
Ser Ala Gly Glu Gly Gln Glu Glu Gly Gly Leu Ala Cys Pro Gly  
20 25 30  
Ala Ser Gln Arg Leu His Gly Gly Pro Cys Pro Gly Gly Ala Pro Pro  
35 40 45  
Arg Glu Thr Ala Gly Ser Arg Pro Ala Ala Arg Ser Pro Gly Arg Glu  
50 55 60  
Ile Leu Phe Ile Cys Ala Arg Gly Arg Arg Gly Asn Pro Cys Leu Ser  
65 70 75 80  
Leu Ser Gln Arg Arg Val Glu Ala Ala His Val Leu Gly His Arg Glu  
85 90 95  
Trp Ser Glu Lys Arg Gln Lys Lys Asp Ile Pro Trp Ser Trp Arg Gln  
100 105 110  
Leu Ser Asn Ile Arg Ala Cys Ser Arg Gly Ile Pro Ala Cys Glu Tyr  
115 120 125  
Gly Thr Ala Tyr Ala Leu Gly Phe Thr Thr Val Ala Thr Pro  
130 135 140

<210> 6249  
<211> 1217  
<212> DNA  
<213> Homo sapiens

<400> 6249  
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60  
aagtctcaac ttccaaccc tcgtcgact ggaggccca agtagcatag atctggtaa  
120  
tgaactgcag gtggaaattt ctgagaaggt ttcccttctta aatagaaaga ttaaaccaca  
180  
gtttccatta tgggtcgact tggaaa gtcatcatcc tgacggccgc tgctcagggg  
240  
atggccaaag cagctgcctt agctttgca agagaaggta ccaaagtcat agccacagac  
300  
attaatgagt ccaaacttca ggaactggaa aagtacccgg gtattcaaac tcgtgtcctt  
360  
gatgtcacaa agaagaaaca aattgtatcg ttgcataatg aagttgagag acttgatgtt  
420  
ctctttatg ttgctggttt tgtccatcat ggaactgtcc tggattgtga ggagaaagac  
480

tgggacttct ccatgaatct caatgtgcgc agcatgtacc tgatgtcaa ggcatttcctt  
 540  
 cctaaaatgc ttgctcagaa atctggcaat attatcaaca tgtcttcgt ggcttcagc  
 600  
 gtc当地aggag ttgtgaacag atgtgtgtac agcacaacca aggccggcgt gattggcctc  
 660  
 aaaaaatctg tggctgcaga tttcatccag cagggcatca ggtgcaactg tgtgtgccca  
 720  
 ggaacagttg atacgcccatac tctacaagaa agaataacaag ccagaggaaa tcctgaagag  
 780  
 gcacggaatg atttcctgaa gagacaaaag acggaaagat tcgcaactgc agaagaaaata  
 840  
 gccatgctct gcgtgtatgg ggcttcgtat gaatctgctt atgttaactgg taaccctgtc  
 900  
 atcattgatg gaggctggag cttgtgatgg taggatctcc atgggtggaa ggaaggcagg  
 960  
 cccttccttat ccacagtgaa cctgggttacg aagaaaactc accaatcatac tccttcgt  
 1020  
 taatcacatg ttaatgaaaaa taagctcttt ttaatgatgt cactgtttgc aagagtctga  
 1080  
 ttcttaagt atattaatct ctttctaatac tcttcgtaaa tcattgtaaa gaaataaaaaa  
 1140  
 tattgaactc atagcaggag aatagttttt aaaataatac tcgatttgg agcaaaaaaaaa  
 1200  
 aaaaaaaaaa aaaaaaaaa  
 1217

<210> 6250  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 6250  
 Met Gly Arg Leu Asp Gly Lys Val Ile Ile Leu Thr Ala Ala Ala Gln  
 1 5 10 15  
 Gly Ile Gly Gln Ala Ala Ala Leu Ala Phe Ala Arg Glu Gly Ala Lys  
 20 25 30  
 Val Ile Ala Thr Asp Ile Asn Glu Ser Lys Leu Gln Glu Leu Glu Lys  
 35 40 45  
 Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln  
 50 55 60  
 Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn  
 65 70 75 80  
 Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys  
 85 90 95  
 Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met  
 100 105 110  
 Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn Ile  
 115 120 125  
 Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn Arg  
 130 135 140  
 Cys Val Tyr Ser Thr Thr Lys Ala Ala Val Ile Gly Leu Thr Lys Ser  
 145 150 155 160  
 Val Ala Ala Asp Phe Ile Gln Gln Gly Ile Arg Cys Asn Cys Val Cys

165	170	175
Pro Gly Thr Val Asp Thr Pro Ser Leu Gln Glu Arg Ile Gln Ala Arg		
180	185	190
Gly Asn Pro Glu Glu Ala Arg Asn Asp Phe Leu Lys Arg Gln Lys Thr		
195	200	205
Gly Arg Phe Ala Thr Ala Glu Glu Ile Ala Met Leu Cys Val Tyr Leu		
210	215	220
Ala Ser Asp Glu Ser Ala Tyr Val Thr Gly Asn Pro Val Ile Ile Asp		
225	230	235
Gly Gly Trp Ser Leu		
245		

<210> 6251  
<211> 1611  
<212> DNA  
<213> Homo sapiens

<400> 6251  
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60 tattgctgac atgcaggaag agtccccatg tagtacaaaa atatgtcttt atacaaaactt  
120 ttttgtgact ttttccgttt cttaataata ggacttctct cagtggtgtga cacccagtga  
180 gggctgaccc atcctccctt cctttgcttc accaggaatg tcatacgaca catggcttga  
240 ctttggagg gcccagtctg tctgacaggg ctggcagac cccggcgcta ttgctttgaa  
300 300  
aaggaggaga aagaccacgc acgggcagca gcctggaggg acccggtggg ctgctgagag  
360 360  
ggggctccgc tgcgacgggc cttggcccaag ctcaaggccc tcacaggagg acagtcagg  
420 420  
gctgggagcc ctaggccgga ctgcatttcc gctcccgcaag gagactttct atgaaataaa  
480 480  
tatagaaaag agggcatecc ccagccccac agcacaagac cctggccctc agcgctggac  
540 540  
agctgagaca gacgcaggtt cgctgttcag ggggagtaag tgctgggctc cagtaggctc  
600 600  
ccacaggccc actgaggcag aggcatttgcgtt cggatgggg catggggaga  
660 660  
aaggggcggtg ggcagccctg ctactgctgg caagagggtgg ccccatttt tccagatggg  
720 720  
gaaactgagg cacaaggagg tttggaaact tgcccaaggt cactcacagt gagtcagctt  
780 780  
tttaggggaa ggagagcggtc tcacactctg gaaaacacag tcacccccc actggggagc  
840 840  
agggccaggc aggaggggcc tcaggccca tgactgcctg gaggggacac tcagcccttc  
900 900  
tgaggacata tggggggtag gcctctgggg aagggtcttt gcttggcattc aggcaggccc  
960 960  
aagtccagta agggcaaggg gagggggcat tctggtgaga acagcatttc tggcaagacg  
1020 1020  
ggcatccact tcaaaatctc ggctcaaaag ggcagcaggg ctgttctcaa gccaggcagg  
1080 1080

cagggtcccc caatccctac aattccctcg agtcctcac caccatggag gacccttgct  
 1140  
 agggtctacc gggagagtca ccacatctat tatgaggcaa gggactggg atatgtccc  
 1200  
 accatcccc aaacacaaga gtaggctagg ggagcgtgca ggcagccccc gtcacggcc  
 1260  
 aggctgcag cccaaaccat gggcccttc gcactggag tccacgtgag ctcagtacca  
 1320  
 cgggaaagga tagagaaggg aacaggttaa cgccgtgta cagcacctca gagaagccac  
 1380  
 tgagacggga gagaaagagc caggtctaga aaggctccc atcacggca gcagagaggg  
 1440  
 actgggtgggc tgaaagggg cagggactgg caggagggc tccctgcct ggggggtgagg  
 1500  
 agggagctca cgtgtggct gtggattcct tgctgtccag ccaggctggg ggcagggagt  
 1560  
 gccatggac tgagccacct agagatggg gagaagttgg tatggtaan a  
 1611

<210> 6252  
<211> 100  
<212> PRT  
<213> Homo sapiens

<400> 6252  
Met Gly Gly Arg Pro Leu Gly Lys Gly Leu Cys Leu Ala Ser Gly Arg  
 1               5               10               15  
Ala Lys Ser Ser Lys Gly Lys Gly Arg Gly His Ser Gly Glu Asn Ser  
 20               25               30  
Ile Ser Gly Lys Thr Gly Ile His Phe Lys Ile Ser Ala Gln Lys Gly  
 35               40               45  
Ser Arg Ala Val Leu Lys Pro Gly Arg Gln Gly Pro Pro Ile Pro Thr  
 50               55               60  
Ile Leu Leu Ser Pro Ser Pro Trp Arg Thr Leu Ala Arg Val Tyr  
 65               70               75               80  
Arg Glu Ser His His Ile Tyr Tyr Glu Ala Arg Ala Leu Gly Tyr Val  
 85               90               95  
Pro Thr Ile Pro  
 100

<210> 6253  
<211> 1953  
<212> DNA  
<213> Homo sapiens

<400> 6253  
nntgtgggta gcgggcaagg cggggccgag gtttgcggc gtcgcagcg gccagaaacc  
 60  
cggctccgag cggccggccgc cggcttccg ctggccgtga gctaaggacg gtccgtccc  
 120  
tctagccagc tccgaatctt gatccaggcg gggccaggg gcccctcgcc tccccctctga  
 180  
ggaccgaaaga tgagcttcctt ctccagcgcg cgctttcta aaacattcaa accaaagaag  
 240

aatatccctg aaggatctca tcagtatgaa ctcttaaaac atgcagaagc aactcttagga  
300  
agtggaaatc tgagacaagc ttttatgttg cctgagggag agatctcaa tgaatggatt  
360  
gtgtgaaca ctgtggattt cttaaccag atcaacatgt tataatggAAC tattacagaa  
420  
ttctgcactg aagcaagctg tccagtcatg tctgcaggc cgagatatga atatcactgg  
480  
cgagatggta ctaatattaa aaagccaatc aaatgttctg cacaaaata cattgactat  
540  
ttgatgactt gggtaaaga tcagcttgcat gatgaaactc ttttcccttc taagattgg  
600  
gtccccatttc ccaaaaactt tatgtctgtg gcaaagacta ttctaaagcg tctgttcagg  
660  
gtttatgccc atatttatca ccagcacttt gattctgtga tgcagctgca agaggaggcc  
720  
cacctcaaca ctcctttaa gcactttatt ttctttgttc aggagttaa tctgattgt  
780  
aggcgtgagc tggcacctct tcaagaatta atagagaaac ttggatcaaa agacagataa  
840  
atgtttcttc tagaacacag ttacccctt gttcatcta ttgctagaac tatctcattg  
900  
ctatctgtta tagacttagt atacaaactt taagaaaaca ggataaaaag atacccattg  
960  
cctgtgtcta ctgataaaat tatccaaag gttagtttgt gtgatagttt ccgagtaaga  
1020  
ccttaaggac acagccaaat cttaagtact gtgtgaccac tcttgttgc atcacatgt  
1080  
catacttggc tgtaatatgt gatggtaac ctgtagctt taaaatttact tattatttt  
1140  
ttactcattt actcagtcat ttcttacaa gaaaatgatt gaatctgttt taggtgacag  
1200  
cacaatggac attaagaatt tccatcaata atttatgaat aagtttccag aacaaatttc  
1260  
ctaataacac aatcagattt gtttattct tttatttac gaataaaaaa tgtattttc  
1320  
agtaccccttg agattttagaa catctgtgtc acttcagata acattttagt ttcaagtttgc  
1380  
tatggtagtg ttttataga taagatacgt ctattttc aaaattcattt attgcagttt  
1440  
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1500  
tttgatcttt atttgagatt gtttcatat ctatctaaat tattaggagt gtgtgtatca  
1560  
gaagtaattt tttaatgtct tctaaggatg gtctccagg cttaaaactt gaaaagctt  
1620  
atccagatag tagctttgg ctgagaaaag gaatccaaaa tattaataaa ttttagatctc  
1680  
aaaaccacta ttttattat ttcatatttt ttcaaggccc ttaaaattct gggtaagaga  
1740  
atggaggaaa atactcagag tacttgatta ttttatttcc ttttattaaa aaattacttc  
1800  
tatgtttta ttgtctcttg agccttagtt aagagtagtg tagaaatgca tgaacttcatt  
1860

cctaataagg ataaaactta aggaaaacca caataaacca tgaaggtgta cacatcttaa

1920

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa

1953

<210> 6254

<211> 216

<212> PRT

<213> Homo sapiens

<400> 6254

Met	Ser	Phe	Leu	Phe	Ser	Ser	Arg	Ser	Ser	Lys	Thr	Phe	Lys	Pro	Lys
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														15	
Lys	Asn	Ile	Pro	Glu	Gly	Ser	His	Gln	Tyr	Glu	Leu	Leu	Lys	His	Ala
														30	
20															
Glu	Ala	Thr	Leu	Gly	Ser	Gly	Asn	Leu	Arg	Gln	Ala	Val	Met	Leu	Pro
35														45	
Glu	Gly	Glu	Asp	Leu	Asn	Glu	Trp	Ile	Ala	Val	Asn	Thr	Val	Asp	Phe
50														60	
Phe	Asn	Gln	Ile	Asn	Met	Leu	Tyr	Gly	Thr	Ile	Thr	Glu	Phe	Cys	Thr
65														80	
Glu	Ala	Ser	Cys	Pro	Val	Met	Ser	Ala	Gly	Pro	Arg	Tyr	Glu	Tyr	His
85														95	
Trp	Ala	Asp	Gly	Thr	Asn	Ile	Lys	Lys	Pro	Ile	Lys	Cys	Ser	Ala	Pro
100														110	
Lys	Tyr	Ile	Asp	Tyr	Leu	Met	Thr	Trp	Val	Gln	Asp	Gln	Leu	Asp	Asp
115														125	
Glu	Thr	Leu	Phe	Pro	Ser	Lys	Ile	Gly	Val	Pro	Phe	Pro	Lys	Asn	Phe
130														140	
Met	Ser	Val	Ala	Lys	Thr	Ile	Leu	Lys	Arg	Leu	Phe	Arg	Val	Tyr	Ala
145														160	
His	Ile	Tyr	His	Gln	His	Phe	Asp	Ser	Val	Met	Gln	Leu	Gln	Glu	Glu
165														175	
Ala	His	Leu	Asn	Thr	Ser	Phe	Lys	His	Phe	Ile	Phe	Phe	Val	Gln	Glu
180														190	
Phe	Asn	Leu	Ile	Asp	Arg	Arg	Glu	Leu	Ala	Pro	Leu	Gln	Glu	Leu	Ile
195														205	
Glu	Lys	Leu	Gly	Ser	Lys	Asp	Arg								
210														215	

<210> 6255

<211> 622

<212> DNA

<213> Homo sapiens

<400> 6255

nntccggagg	ctgagacagg	agaatcgctt	gaacccagga	ggcccgagggtt	gcagtggacc
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gagatcatgc	cattgcactc	cagcctgggc	aacagagtga	gacttcatct	aaaaaaaaaa
120					
aaagccacag	tggctgcctt	cacagccagc	gagggccacg	cacatcccag	ggttagtgag
180					
ctacccaaga	cggatgaggg	cctaggcttc	aacatcatgg	gtggcaaaga	gcaaaaactcg
240					

cccatctaca tctccccgtt catcccaggg ggtgtggctg accgcctatgg aggcctcaag  
 300  
 cgtggggatc aactgttgtc ggtgaacggt gtgagcggtt agggtgagca gcatgagaag  
 360  
 gcggtggagc tgctgaaggc ggcccagggc tcgggtgaagc tgggtgtccg ttacacaccc  
 420  
 cgagtgtgg aggagatgga ggcccggttc gagaagatgc gctctgccccg ccggcgccaa  
 480  
 cagcatcaga gctactcgta cttggagtttctt ctaggttcaa accacagatc tggacgttca  
 540  
 cgtgcactctt cttectgtac agtattttttt gttcctggca ctttattttaa agatttttta  
 600  
 ccctcaaaaa aaaaaaaaaaa aa  
 622

<210> 6256  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 6256  
 Met Pro Leu His Ser Ser Leu Gly Asn Arg Val Arg Leu His Leu Lys  
 1 5 10 15  
 Lys Lys Lys Ala Thr Val Ala Ala Phe Thr Ala Ser Glu Gly His Ala  
 20 25 30  
 His Pro Arg Val Val Glu Leu Pro Lys Thr Asp Glu Gly Leu Gly Phe  
 35 40 45  
 Asn Ile Met Gly Gly Lys Glu Gln Asn Ser Pro Ile Tyr Ile Ser Arg  
 50 55 60  
 Val Ile Pro Gly Gly Val Ala Asp Arg His Gly Gly Leu Lys Arg Gly  
 65 70 75 80  
 Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu Gly Glu Gln His  
 85 90 95  
 Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Gln Gly Ser Val Lys Leu  
 100 105 110  
 Val Val Arg Tyr Thr Pro Arg Val Leu Glu Glu Met Glu Ala Arg Phe  
 115 120 125  
 Glu Lys Met Arg Ser Ala Arg Arg Arg Gln Gln His Gln Ser Tyr Ser  
 130 135 140  
 Ser Leu Glu Ser Arg Gly  
 145 150

<210> 6257  
 <211> 2216  
 <212> DNA  
 <213> Homo sapiens

<400> 6257  
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 gggatgcctc cttcccatg ctcccacccc tcccatccca gaactccgtt gggctcagt  
 120  
 tcctctgttg agggaaaggta ttgggtgccca gatgcctact ctgcaggaga gggaggaaacc  
 180

ttgtccccctt gcggggagtcg ctggctcttt ctgttgtggg gaagaaggaa ggtgggaggg  
240  
gcactgtcca ccagcactca gagctccatt atgtccccag ctggggttgc agggtagggg  
300  
ggactggggg tgcgtccccag cctcagcaga cgaggggcct cagggatgag gctgccagga  
360  
tagcgccaga gaagcagcgc agagcaaggg ctccctgagtg ggggcagggc tggggagaag  
420  
gtcatggggg ggctgcagta ggggtggtca ttgtgcaggc tgagttgaga gaagtgggtg  
480  
gcccattttct cctcagacag aaactgcttg cgccagggct cctgtcttc ctcaggcgc  
540  
cgcttggtgc tcataggcac agctccctgg agaggggagc tggcgtccag gccccaaagtc  
600  
acccccaagg cggcccgccgg gaggcgctgg gcccctccct gggggcctcg ctgcaaggc  
660  
tgctgcagga tcattgggtt ttggggctt ggggtggga tctgggcac aggggaggag  
720  
tctctgaggg cgtggccaag agaggatggg cgtggctta ggcgggcaca gccgcgaggt  
780  
tctgcgcggg cgccggaaagc gggccgcgcg tggcggaaagg caggcttgc ctcggggcg  
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900  
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960  
gaaggcggta gggccacg gagaggaacc gctctaggca cgtaaggcct cgtgaggttg  
1020  
cgtcgcgcgc ggagcactct gggacttgc gttctggaga tggagcgagc tgtgccgc  
1080  
gcgggtgcctc tgggtcagac agaggtgttc caggcctgc agcggctcca tatgaccatc  
1140  
ttctcccaga gctgttcacc atgtggaaag ttctggcgg ctggcaacaa ttacgggc  
1200  
attgcacatct tcagcttgc ctctgcattt agtcagaag ccaaagagga aagtaagaag  
1260  
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1320  
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 Ser Pro Cys Gly Lys Phe Leu Ala Ala Gly Asn Asn Tyr Gly Gln Ile  
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Lys Ala Gln Val Pro Gly Ser Ser Pro Gly Leu Leu Ser Leu Ser Leu		
290	295	300
Asn Gln Gln Pro Ala Ala Pro Glu Cys Lys Val Leu Thr Ala Ala Gly		
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Asn Ser Cys Arg Val Asp Val Phe Thr Asn Leu Gly Tyr Arg Ala Phe		
325	330	335
Ser Leu Ser Phe		
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&lt;210&gt; 6259

&lt;211&gt; 384

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6259

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&lt;210&gt; 6260

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6260

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50          55          60
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65          70          75          80
Gln Val Asn Ser Phe Ser Asp Leu Lys Ala Ser Thr Leu Val His Lys
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 <212> PRT  
 <213> Homo sapiens

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 His Lys Asp Trp Ile Phe Ser Ile Ala Trp Ile Ser Asp Thr Met Ala  
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Trp Lys Ala Glu Asn Thr Leu Ser Lys Leu Leu Ser Thr Lys Leu Pro		
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305	310	315
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Gln Gly Ser Leu Leu Phe Tyr Asp Ile Arg Ala Gln Arg Phe Leu Glu		
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Trp Arg Asn Tyr Phe Ser Asp Ile Asp Phe Phe Pro Asn Ala Val Tyr		
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&lt;210&gt; 6263

&lt;211&gt; 2508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6263

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Gln Ile Arg Lys Glu Gln Glu Glu Arg Glu Ala Ile	Arg Leu Ser	
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Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe	Asp Phe Val Ala	
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&lt;210&gt; 6265

&lt;211&gt; 1344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6265

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<213> Homo sapiens  
  
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Arg	Ser	Cys	Tyr	Ile	Cys	His	Arg	Gln	Leu	Leu	Phe	Cys	Arg	Val	Thr
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&lt;210&gt; 6267

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6267

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&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys  
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Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu  
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Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys  
85 90 95  
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val  
100 105 110  
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr  
115 120 125  
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu  
130 135 140  
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln  
145 150 155 160  
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile  
165 170 175  
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro  
180 185 190  
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro  
195 200 205  
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu  
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Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser  
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Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly  
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260 265 270  
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Met Val Arg Pro Thr Ser Val Thr Pro Gly Leu Phe Gln Val Leu Lys			
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Ala Val Tyr Phe Ala Cys Tyr Ser Lys Ala Lys Glu Gln Phe Asn Gly			
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Ile Phe Val Pro Asn Ser Asn Ile Val His Leu Phe Ser Ala Gly Ser			
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Ala Ala Phe Ile Thr Asn Ser Leu Met Asn Pro Ile Trp Met Val Lys			
115	120	125	
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130	135	140	
Thr Leu Gln Cys Ala Arg Tyr Val Tyr Gln Thr Glu Gly Ile Arg Gly			
145	150	155	160
Phe Tyr Arg Gly Leu Thr Ala Ser Tyr Ala Gly Ile Ser Glu Thr Ile			
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Ile Cys Phe Ala Ile Tyr Glu Ser Leu Lys Lys Tyr Leu Lys Glu Ala			
180	185	190	
Pro Leu Ala Ser Ser Ala Asn Gly Thr Glu Lys Asn Ser Thr Ser Phe			
195	200	205	
Phe Gly Leu Met Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys			
210	215	220	
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225	230	235	240
Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu			
245	250	255	
Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg			
260	265	270	
Gln Ile Pro Asn Thr Ala Ile Val Leu Ser Thr Tyr Glu Leu Ile Val			
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Tyr Leu Leu Glu Asp Arg Thr Gln			
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&lt;210&gt; 6273

&lt;211&gt; 2355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6273

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<212> PRT  
<213> Homo sapiens

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&lt;210&gt; 6276

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6276

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Phe	Gly	Leu	Met
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		Val	Ala
		Phe	Gly
		Met	Asn
		Leu	Glu
		Ser	Ser
		Leu	
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Glu	Glu	Asp	His
			Arg
		Ile	Phe
		Trp	Leu
		Ile	Thr
		Gly	Ile
		Met	Phe
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Gly	Ser	Gly	Leu
			Ile
		Trp	Arg
		Arg	Leu
		Leu	Ser
		Phe	Leu
		Gly	Arg
115		120	125
Leu	Glu	Ala	Pro
			Leu
		Pro	Pro
		Met	Met
		Ala	Ser
		Ser	Leu
		Pro	Lys
		Lys	Lys
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Leu	Leu	Ala	Asp
		Asp	Arg
		Ser	Met
		Glu	Leu
		Lys	Asn
		Ser	Leu
		Arg	Leu
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		Ile	Leu
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&lt;210&gt; 6277

&lt;211&gt; 1206

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6277

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 65 70 75 80  
 Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly Asp Gly Ser Pro Pro Lys  
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 Pro Lys Asp Pro Val Ser Ala Ala Val Pro Ala Pro Xaa Glu Lys Gln  
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 115 120 125  
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 130 135 140  
 His Thr Leu Arg Arg Ala Val Lys Lys Pro Ala Pro Ala Pro Pro Lys  
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 165 170 175  
 Thr Ser Gln His Pro Pro Ser Leu Ser Pro Lys Pro Pro Thr Arg Ser  
 180 185 190  
 Pro Ser Pro Pro Pro Ser Thr Arg Ala Ser Leu Gln Ala Ser Pro Pro  
 195 200 205  
 Pro Pro Pro Ser Ser Gln His Pro Gly Gly Thr Pro Xaa Ser Leu Ser  
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 225 230 235 240  
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 245 250 255  
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 260 265 270  
 Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro Pro Leu Gly Lys Gln Asn  
 275 280 285  
 Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala Gly Gly Asn Pro Glu Thr  
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<211> 2795

<212> DNA

<213> Homo sapiens

<400> 6279

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<212> PRT  
<213> Homo sapiens

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35 40 45  
Ser Leu Ser Leu Glu Ile Leu Gln Ile Ile Lys Glu Ser Gln Gln  
50 55 60  
His Gly Leu Arg His Gly Asp Phe Gln Arg Tyr Arg Gly Tyr Cys Ser  
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Arg Arg Gln Arg Arg Leu Arg Lys Thr Leu Asn Phe Lys Met Gly Asn  
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Arg His Lys Phe Thr Gly Lys Lys Val Thr Glu Glu Leu Leu Thr Asp  
100 105 110  
Asn Arg Tyr Leu Leu Val Leu Met Asp Ala Glu Arg Ala Trp Ser  
115 120 125  
Tyr Ala Met Gln Leu Lys Gln Glu Ala Asn Thr Glu Pro Arg Lys Arg  
130 135 140  
Phe His Leu Leu Ser Arg Leu Arg Lys Ala Val Lys His Ala Glu Glu  
145 150 155 160  
Leu Glu Arg Leu Cys Lys Ser Asn Arg Val Asp Ala Lys Thr Lys Leu  
165 170 175  
Glu Ala Gln Ala Tyr Thr Ala Tyr Leu Ser Gly Met Leu Arg Phe Glu  
180 185 190  
His Gln Glu Trp Lys Ala Ala Ile Glu Ala Phe Asn Lys Cys Lys Thr  
195 200 205  
Ile Tyr Glu Lys Leu Ala Ser Ala Phe Thr Glu Glu Gln Ala Val Leu  
210 215 220  
Tyr Asn Gln Arg Val Glu Glu Ile Ser Pro Asn Ile Arg Tyr Cys Ala  
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260 265 270  
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275 280 285  
Glu Trp Arg Gly Arg Thr Val Pro Val Lys Ile Asp Lys Val Arg Ile  
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Phe Leu Leu Gly Leu Ala Asp Asn Glu Ala Ala Ile Val Gln Ala Glu  
305 310 315 320  
Ser Glu Glu Thr Lys Glu Arg Leu Phe Glu Ser Met Leu Ser Glu Cys  
325 330 335  
Arg Asp Ala Ile Gln Val Val Arg Glu Glu Leu Lys Pro Asp Gln Lys

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370	375	380
Lys Arg Asn Glu Asn Met Ala Lys Gly Leu His Arg Ala Leu Leu Gln		
385	390	395
400		
Gln Gln Pro Glu Asp Asp Ser Lys Arg Ser Pro Arg Pro Gln Asp Leu		
405	410	415
Ile Arg Leu Tyr Asp Ile Ile Leu Gln Asn Leu Val Glu Leu Leu Gln		
420	425	430
Leu Pro Gly Leu Glu Glu Asp Lys Ala Phe Gln Lys Glu Ile Gly Leu		
435	440	445
Lys Thr Leu Val Phe Lys Ala Tyr Arg Cys Phe Phe Ile Ala Gln Ser		
450	455	460
Tyr Val Leu Val Lys Lys Trp Ser Glu Ala Leu Val Leu Tyr Asp Arg		
465	470	475
480		
Val Leu Lys Tyr Ala Asn Glu Val Asn Ser Asp Ala Gly Ala Phe Lys		
485	490	495
Asn Ser Leu Lys Asp Leu Pro Asp Val Gln Glu Leu Ile Thr Gln Val		
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Arg Ser Glu Lys Cys Ser Leu Gln Ala Ala Ile Leu Asp Ala Asn		
515	520	525
Asp Ala His Gln Thr Glu Thr Ser Ser Gln Val Lys Asp Asn Lys		
530	535	540
Pro Leu Val Glu Arg Phe Glu Thr Phe Cys Leu Asp Pro Ser Leu Val		
545	550	555
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Thr Lys Gln Ala Asn Leu Val His Phe Pro Pro Gly Phe Gln Pro Ile		
565	570	575
Pro Cys Lys Pro Leu Phe Phe Asp Leu Ala Leu Asn His Val Ala Phe		
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Pro Pro Leu Glu Asp Lys Leu Glu Gln Lys Thr Lys Ser Gly Leu Thr		
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Gly Tyr Ile Lys Gly Ile Phe Gly Phe Arg Ser		
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<212> DNA  
<213> Homo sapiens

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 <212> PRT  
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<400> 6282  
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 Gln Ser Arg Gly Met Tyr Ser Asn Arg Met Arg Ser Tyr Lys Gln Glu  
 65 70 75 80  
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 Asp Glu Val Arg Asn Glu Leu Leu Gly Asp Asp Gly Asn Ser Ser Glu  
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 115 120 125  
 Ser Arg Arg Leu Glu Ala Gly Tyr Gln Ile Ala Val Glu Thr Gly Glu  
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<210> 6283  
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 <212> DNA  
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<210> 6284
<211> 122
<212> PRT
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      20          25          30
Lys Pro Ile His Val Phe Phe Gly Ala Ala Ile Leu Ser Leu Ser Ile
      35          40          45
Ala Ser Val Ile Ser Gly Ile Asn Glu Lys Leu Phe Phe Ser Leu Lys
      50          55          60
Asn Thr Thr Arg Pro Tyr His Ser Leu Pro Ser Glu Ala Val Phe Ala
      65          70          75          80
Asn Ser Thr Gly Met Leu Val Val Ala Phe Gly Leu Leu Val Leu Tyr
      85          90          95
Ile Leu Leu Ala Ser Ser Trp Lys Arg Pro Glu Pro Gly Ile Leu Thr
      100         105         110
Asp Arg Gln Pro Leu Leu His Asp Gly Glu
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<212> DNA
<213> Homo sapiens

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&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6286

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&lt;210&gt; 6287

&lt;211&gt; 1674

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6287

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<213> Homo sapiens

<400> 6288  
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Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser  
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85               90               95  
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100              105              110  
Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val  
115              120              125  
Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe  
130              135              140  
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<212> DNA  
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 35 40 45  
 Val Glu Gln Leu Ala Glu Gly Leu Leu Ser His Tyr Leu Pro Asp Leu  
 50 55 60  
 Gln Arg Ser Lys Gln Ala Leu Gln Glu Leu Thr Gln Asn Gln Val Val

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				85	90									95	
Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr	His
				100	105									110	
Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys
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Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg	Gln
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&lt;211&gt; 2718

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6291

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<400> 6292  
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Ala Leu Trp Leu Arg Phe Lys Tyr Tyr Ser Phe Phe Asp Leu Asp Pro  
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Lys Thr Asp Pro Val Arg Leu Thr Gln Leu Tyr Glu Gln Ala Arg Trp  
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115 120 125  
Phe Ala Ala Leu Gln Tyr His Ile Asn Lys Leu Ser Gln Ser Gly Glu  
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Val Gly Glu Pro Ala Gly Thr Asp Pro Gly Leu Asp Asp Leu Asp Val  
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165 170 175  
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Gly Arg Thr Met Ala Asp Ser Ser Tyr Thr Ser Glu Val Gln Ala Ile  
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Pro Pro Arg Pro Asp Ala Ser Ala Glu Gly Leu Asn Pro Tyr Gly Leu  
325 330 335  
Val Ala Pro Arg Phe Gln Arg Lys Phe Lys Ala Lys Gln Leu Thr Pro

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Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser	Arg Lys Asp Glu Ile	
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Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe	Asp Glu His Ile Asn	
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Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg	Glu Arg Ala Arg Gly Glu	
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Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr	Gly Gly His Glu Ala	
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Phe		

&lt;210&gt; 6293

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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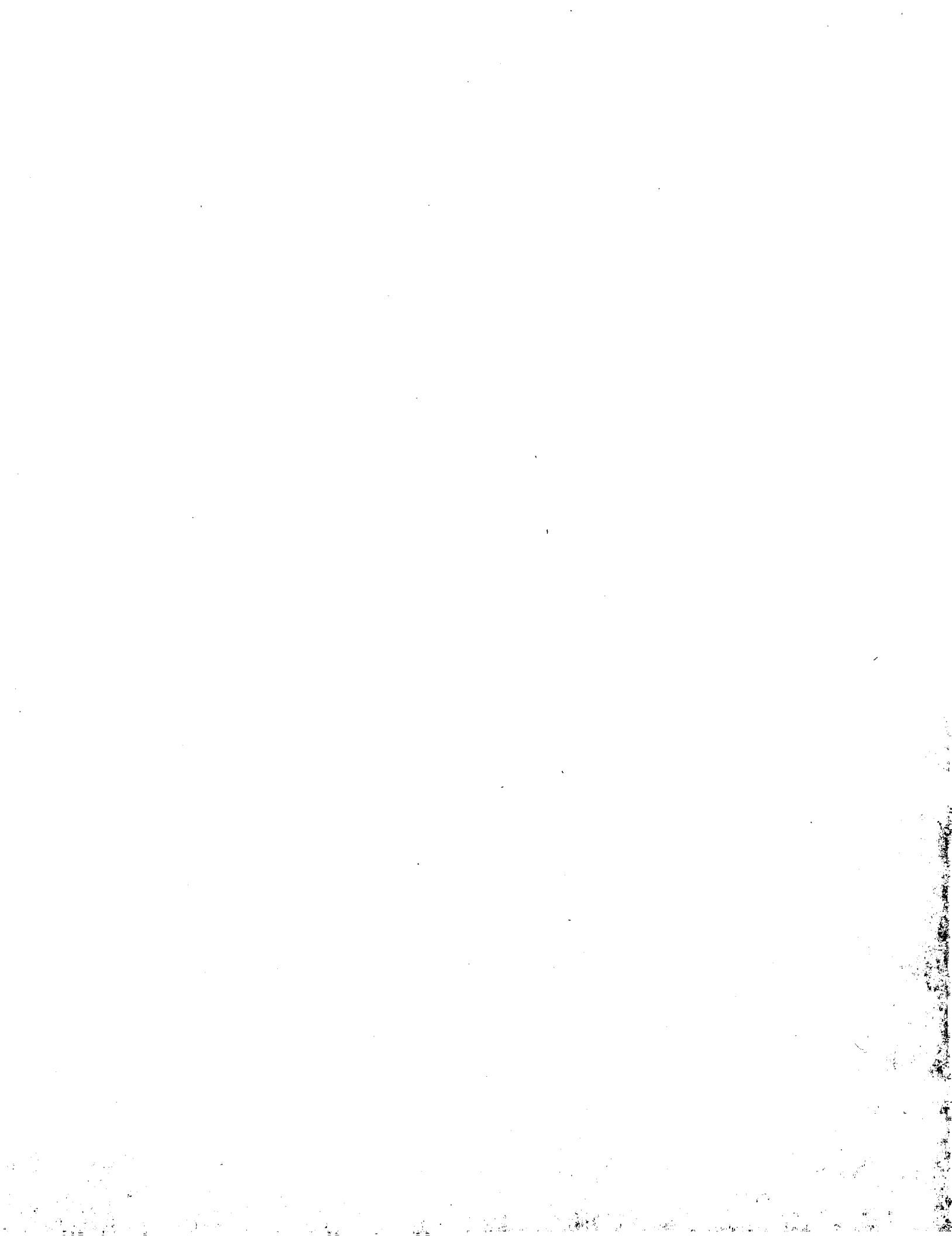
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<212> PRT  
<213> Homo sapiens

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85 90 95  
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Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala  
115 120 125  
Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln  
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Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr  
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180 185 190  
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<213> Homo sapiens

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1860



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340	345	350	
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His			
355	360	365	
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg			
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&lt;210&gt; 6297

&lt;211&gt; 472

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6297

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472

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&lt;210&gt; 6298

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6298

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Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg			
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Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His			
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His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln			
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Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys			
85	90	95	
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys			

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<212> DNA  
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 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<400> 6300  
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 Arg Glu Ser Leu Val Leu Tyr His Trp Thr Gln Ser Phe Ser Ser Gln  
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 Ala Thr Thr Asp Leu Met Lys Leu Asp His Glu Glu Glu Pro Gln Leu  
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 Ser Glu Pro Tyr Leu Ser Lys Gln Lys Lys Leu Met Ala Lys Ile Leu  
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 225 230 235 240  
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325	330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu		
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Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys		
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Lys Lys Tyr Ile		
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&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 6302

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6302

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			35				40					45			
Ser	Ser	Val	Ser	Arg	Gly	Asn	Val	Ser	Thr	Pro	Pro	Arg	His	Ser	Ser
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Gly	Ser	Leu	Thr	Pro	Pro	Val	Thr	Pro	Pro	Ile	Thr	Pro	Ser	Ser	Ser
			65			70				75			80		
Phe	Arg	Ser	Ser	Thr	Pro	Thr	Gly	Ser	Glu	Tyr	Asp	Glu	Glu	Glu	Val
				85				90				95			
Asp	Tyr	Glu	Glu	Ser	Asp	Ser	Asp	Glu	Ser	Trp	Thr	Thr	Glu	Ser	Ala
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Ile	Ser	Ser	Glu	Ala	Ile	Leu	Ser	Ser	Met	Cys	Met	Asn	Gly	Gly	Glu
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Glu	Lys	Pro	Phe	Ala	Cys	Pro	Val	Pro	Gly	Cys	Lys	Lys	Arg	Tyr	Lys
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Asn	Val	Asn	Gly	Ile	Lys	Tyr	His	Ala	Lys	Asn	Gly	His	Arg	Thr	Gln
			145			150			155			160			
Ile	Arg	Val	Arg	Lys	Pro	Phe	Lys	Cys	Arg	Cys	Gly	Lys	Ser	Tyr	Lys
				165			170			175					
Thr	Ala	Gln	Gly	Leu	Arg	His	His	Thr	Ile	Asn	Phe	His	Pro	Pro	Val
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Ser	Ala	Glu	Ile	Ile	Arg	Lys	Met	Gln	Gln						
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&lt;210&gt; 6303

&lt;211&gt; 676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 6303

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 <212> PRT  
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 35 40 45  
 Asp Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg  
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 Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp  
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 Cys Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala  
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 130 135 140  
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 <212> DNA  
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<210> 6306  
<211> 474  
<212> PRT  
<213> Homo sapiens

<400> 6306  
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Thr Trp Asp Ser Thr Phe Cys Ala Val Asn Pro Lys Phe Leu Ala Val  
 35               40               45  
Ile Val Glu Ala Ser Gly Gly Ala Phe Leu Val Leu Pro Leu Ser  
 50               55               60  
Lys Thr Gly Arg Ile Asp Lys Ala Tyr Pro Thr Val Cys Gly His Thr  
 65               70               75               80  
Gly Pro Val Leu Asp Ile Asp Trp Cys Pro His Asn Asp Gln Val Ile  
 85               90               95  
Ala Ser Gly Ser Glu Asp Cys Thr Val Met Val Trp Gln Ile Pro Glu  
 100              105              110  
Asn Gly Leu Thr Ser Pro Leu Thr Glu Pro Val Val Val Leu Glu Gly  
 115              120              125  
His Thr Lys Arg Val Gly Ile Ile Ala Trp His Pro Thr Ala Arg Asn  
 130              135              140  
Val Leu Leu Ser Ala Gly Cys Asp Asn Val Val Leu Ile Trp Asn Val  
 145              150              155              160  
Gly Thr Ala Glu Glu Leu Tyr Arg Leu Asp Ser Leu His Pro Asp Leu  
 165              170              175  
Ile Tyr Asn Val Ser Trp Asn His Asn Gly Ser Leu Phe Cys Ser Ala  
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Cys Lys Asp Lys Ser Val Arg Ile Ile Asp Pro Arg Arg Gly Thr Leu  
 195              200              205  
Val Ala Glu Arg Glu Lys Ala His Glu Gly Ala Arg Pro Met Arg Ala  
 210              215              220  
Ile Phe Leu Ala Asp Gly Lys Val Phe Thr Thr Gly Phe Ser Arg Met  
 225              230              235              240  
Ser Glu Arg Gln Leu Ala Leu Trp Asn Pro Lys Asn Met Gln Glu Pro  
 245              250              255  
Ile Ala Leu His Glu Met Asp Thr Ser Asn Gly Val Leu Leu Pro Phe  
 260              265              270  
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Ser Ile Arg Tyr Phe Glu Ile Thr Asp Glu Ser Pro Tyr Val His Tyr		
290	295	300
Leu Asn Thr Phe Ser Ser Lys Glu Pro Gln Arg Gly Met Gly Tyr Met		
305	310	315
Pro Lys Arg Gly Leu Asp Val Asn Lys Cys Glu Ile Ala Arg Phe Phe		
325	330	335
Lys Leu His Glu Arg Lys Cys Glu Pro Ile Ile Met Thr Val Pro Arg		
340	345	350
Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro		
355	360	365
Glu Ala Ala Leu Glu Ala Glu Trp Phe Glu Gly Lys Asn Ala Asp		
370	375	380
Pro Ile Leu Ile Ser Leu Lys His Gly Tyr Ile Pro Gly Lys Asn Arg		
385	390	395
Asp Leu Lys Val Val Lys Lys Asn Ile Leu Asp Ser Lys Pro Thr Ala		
405	410	415
Asn Lys Lys Cys Asp Leu Ile Ser Ile Pro Lys Lys Thr Thr Asp Thr		
420	425	430
Ala Ser Val Gln Asn Glu Ala Lys Leu Asp Glu Ile Leu Lys Glu Ile		
435	440	445
Lys Ser Ile Lys Asp Thr Ile Cys Asn Gln Asp Glu Arg Ile Ser Lys		
450	455	460
Leu Glu Gln Gln Met Ala Lys Ile Ala Ala		
465	470	

&lt;210&gt; 6307

&lt;211&gt; 2119

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6307

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240  
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660

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720  
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<210> 6308  
<211> 483  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6308

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 Trp Gln Ser Tyr Leu Gln Gly Gln Met Ile Ser Ala Glu Asp Cys Glu  
 35 40 45  
 Phe Ile Gln Arg Phe Glu Met Lys Arg Ser Pro Glu Glu Lys Gln Glu  
 50 55 60  
 Met Leu Gln Thr Glu Gly Ser Gln Cys Ala Lys Thr Phe Ile Asn Leu  
 65 70 75 80  
 Met Thr His Ile Cys Lys Glu Gln Thr Val Gln Tyr Ile Leu Thr Met  
 85 90 95  
 Val Asp Asp Met Leu Gln Glu Asn His Gln Arg Val Ser Ile Phe Phe  
 100 105 110  
 Asp Tyr Ala Arg Cys Ser Lys Asn Thr Ala Trp Pro Tyr Phe Leu Pro  
 115 120 125  
 Met Leu Asn Arg Gln Asp Pro Phe Thr Val His Met Ala Ala Arg Ile  
 130 135 140  
 Ile Ala Lys Leu Ala Ala Trp Gly Lys Glu Leu Met Glu Gly Ser Asp  
 145 150 155 160  
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 165 170 175  
 Leu Arg Gly Ser Gly Val Ala Val Glu Thr Gly Thr Val Ser Ser Ser  
 180 185 190  
 Asp Ser Ser Gln Tyr Val Gln Cys Val Ala Gly Cys Leu Gln Leu Met  
 195 200 205  
 Leu Arg Val Asn Glu Tyr Arg Phe Ala Trp Val Glu Ala Asp Gly Val  
 210 215 220  
 Asn Cys Ile Met Gly Val Leu Ser Asn Lys Cys Gly Phe Gln Leu Gln  
 225 230 235 240  
 Tyr Gln Met Ile Phe Ser Ile Trp Leu Leu Ala Phe Ser Pro Gln Met  
 245 250 255  
 Cys Glu His Leu Arg Arg Tyr Asn Ile Ile Pro Val Leu Ser Asp Ile  
 260 265 270  
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 275 280 285  
 Phe Arg Asn Phe Leu Glu Lys Ser Thr Glu Arg Glu Thr Arg Gln Glu  
 290 295 300  
 Tyr Ala Leu Ala Met Ile Gln Cys Lys Val Leu Lys Gln Leu Glu Asn  
 305 310 315 320  
 Leu Glu Gln Gln Lys Tyr Asp Asp Glu Asp Ile Ser Glu Asp Ile Lys  
 325 330 335  
 Phe Leu Leu Glu Lys Leu Gly Glu Ser Val Gln Asp Leu Ser Ser Phe  
 340 345 350  
 Asp Glu Tyr Ser Ser Glu Leu Lys Ser Gly Arg Leu Glu Trp Ser Pro  
 355 360 365  
 Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn  
 370 375 380  
 Glu Lys Asn Tyr Glu Leu Leu Lys Ile Leu Thr Lys Leu Leu Glu Val  
 385 390 395 400  
 Ser Asp Asp Pro Gln Val Leu Ala Val Ala His Asp Val Gly Glu

405	410	415
Tyr Val Arg His Tyr Pro Arg Gly Lys Arg Val Ile Glu Gln Leu Gly		
420	425	430
Gly Lys Gln Leu Val Met Asn His Met His His Glu Asp Gln Gln Val		
435	440	445
Arg Tyr Asn Ala Leu Leu Ala Val Gln Lys Leu Met Val His Asn Trp		
450	455	460
Glu Tyr Leu Gly Lys Gln Leu Gln Ser Glu Gln Pro Gln Thr Ala Ala		
465	470	475
Ala Arg Ser		480

<210> 6309  
<211> 564  
<212> DNA  
<213> Homo sapiens

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564

<210> 6310  
<211> 83  
<212> PRT  
<213> Homo sapiens

<400> 6310  
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20 25 30  
Leu Gln Glu Ala Arg Pro Leu Gly Leu Leu Val Pro Asp Ala Gly Asp  
35 40 45  
Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala  
50 55 60  
Leu Pro Val Gln Gln Arg Asp Leu Ser Ser Leu Glu Pro Pro Pro Pro

65

70

75

80

Arg Phe Glu

&lt;210&gt; 6311

&lt;211&gt; 1548

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6311

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120  
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180  
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240  
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300  
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420  
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<210> 6312  
 <211> 234  
 <212> PRT  
 <213> Homo sapiens

<400> 6312  
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 20              25              30  
 Leu Asp Glu Tyr Lys Glu Gln Tyr Phe Ser Leu Arg Pro Asp Leu Lys  
 35              40              45  
 Thr Lys Ser Tyr Gly Asn Ile Ser Glu Arg Val Glu Leu Arg Lys Lys  
 50              55              60  
 Leu Gly Cys Lys Ser Phe Lys Trp Tyr Leu Asp Asn Val Tyr Pro Glu  
 65              70              75              80  
 Met Gln Ile Ser Gly Ser His Ala Lys Pro Gln Gln Pro Ile Phe Val  
 85              90              95  
 Asn Arg Gly Pro Lys Arg Pro Lys Val Leu Gln Arg Gly Arg Leu Tyr  
 100             105             110  
 His Leu Gln Thr Asn Lys Cys Leu Val Ala Gln Gly Arg Pro Ser Gln  
 115             120             125  
 Lys Gly Gly Leu Val Val Leu Lys Ala Cys Asp Tyr Ser Asp Pro Asn  
 130             135             140  
 Gln Ile Trp Ile Tyr Asn Glu Glu His Glu Leu Val Leu Asn Ser Leu  
 145             150             155             160  
 Leu Cys Leu Asp Met Ser Glu Thr Arg Ser Ser Asp Pro Pro Arg Leu  
 165             170             175  
 Met Lys Cys His Gly Ser Gly Ser Gln Gln Trp Thr Phe Gly Lys  
 180             185             190  
 Asn Asn Arg Leu Tyr Gln Val Ser Val Gly Gln Cys Leu Arg Ala Val  
 195             200             205  
 Asp Pro Leu Gly Gln Lys Gly Ser Val Ala Met Ala Ile Cys Asp Gly  
 210             215             220  
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 225             230

<210> 6313  
 <211> 725  
 <212> DNA  
 <213> Homo sapiens

<400> 6313  
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 720  
 ggagc  
 725

&lt;210&gt; 6314

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6314

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								20		25			30		
His	Pro	Ser	Thr	Asn	Ser	Leu	Leu	Arg	Glu	Gln	Ile	Ser	Leu	Tyr	Pro
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Glu	Val	Lys	Gly	Glu	Ile	Ala	Arg	Lys	Asp	Glu	Lys	Leu	Leu	Ser	Phe
								50		55			60		
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195

**What is claimed is:**

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ II NO: 2 $n$ , wherein  $n$  is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ II NO: 2 $n$ , wherein  $n$  is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprise the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is a integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.

9 A host cell comprising the isolated nucleic acid molecule of claim 1.

10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2n, wherein n is any integer 1-3161.

11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2n, wherein n is any integer 1-3161.

12. An antibody that selectively binds to the polypeptide of claim 10.

13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12;

and a pharmaceutically acceptable carrier.

14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.

15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.

16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.
27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.
28. The method of claim 27, wherein said subject is a human.
29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.
30. The method of claim 29, wherein said subject is a human.
31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject an antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.
32. The method of claim 31, wherein said subject is a human.